Status of Iraq Reconstruction

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INTRODUCTION

The security situation in Iraq continues to deteriorate, hindering progress in all reconstruction sectors and threatening the overall reconstruction effort.

In this Report, SIGIR continues to highlight and analyze developments in these reconstruction sectors: electricity, oil and gas, water, economic and societal development, security and justice, health care, and transportation and communications.

In addition to reporting on programs and projects funded with the Iraq Relief and Reconstruction Fund (IRRF) and the Iraq Security Forces Fund (ISFF), this Report also highlights the expanded oversight responsibilities assigned to SIGIR under the Iraq Reconstruction Accountability Act of 2006, which include reporting on activities funded by the FY 2006 Commander's Emergency Response Program (CERP) and the FY 2006 Economic Support Fund (ESF) in the Foreign Assistance budget. CERP and ESF were appropriated to continue reconstruction started with IRRF supplemental funds.

Section 2 also provides information on contracts, including the costs to complete reconstruction projects in Iraq, updates on the sources of funding for Iraq reconstruction, and a review of the continuing effort to support Iraqi anticorruption programs.

Status of Funds and Projects for this Quarter

As the IRRF reconstruction program begins to close out, SIGIR will increasingly focus on activities, outputs, and outcomes related to ISFF, CERP, and ESF funding. This quarter, SIGIR provides only high-level data on CERP- and ESF-funded activities; more in-depth analysis will follow next quarter.

IRAQ RELIEF AND RECONSTRUCTION FUND (IRRF)

To assess overall progress, SIGIR reviews three aspects of reconstruction—activities, outputs, and outcomes:

- Activities: reconstruction at the project level (e.g., an electric turbine, a water treatment plant, a primary healthcare center, a training program for teachers)
- Outputs: results of the reconstruction projects (e.g., increased electricity generation, increased capacity to treat wastewater, more trained teachers)
- Outcomes: potential effects of the project outputs for the people of Iraq (e.g., hours of power, more Iraqis with access to clean water, more Iraqi children vaccinated for polio, higher literacy rates)

SIGIR, the Gulf Region Division-Project and Contracting Office (GRD-PCO),6 the DoS Section 2207 Report, and Public Law 108-106, as amended, use different definitions of the Iraq reconstruction sectors and project status. To compare the various definitions of sectors, see Appendix D.

Overview of the IRRF Program

The IRRF program is now beginning to wind down, and almost all remaining projects will be completed by the end of FY 2007. IRRF funds have been obligated, and around 80% have been expended.⁷

As of December 30, 2006, 12,395 projects (92%) had been completed in all sectors, with an additional 766 still ongoing (6%) and 351 yet to begin (3%). For a breakdown of IRRF funds and projects, see Figures 2-1, 2-2, and 2-3.

All funds that were not obligated by September 30, 2006, can be used to pay for legally permitted adjustments on contracts signed before September 30, 2006. These expired funds will remain available for five years and will be obligated when they are to be used. For a snapshot of IRRF funds by sector, see Table 2-1.

Last quarter, the IRRF-funded education and agriculture programs closed out operations, with only a few tasks remaining. Most of the IRRF funding used in the democracy subsector was spent in 2005 on elections and the

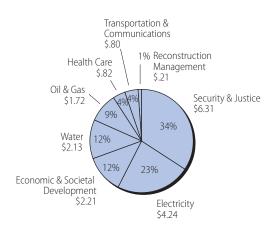
constitutional referendum; other money was used to fund projects in 2006 and into 2007. Most of the IRRF dollars used to develop the security and justice sector have been expended, and activities in this sector are now mostly funded by the ISFF.

Congress was notified that IRRF funds have been shifted in recent quarters to health care, refugees and human rights, and transportation and communications to supplement a variety of projects and programs.

The oil and gas, electricity, and water sectors have the largest portions of the IRRF remaining for expenditure.

Finally, ministerial capacity development and sustainment initiatives became increasingly important in 2006 and are now central components of the current reconstruction strategy for U.S.-funded projects.

Figure 2-1 **SECTOR SHARES OF IRRF FUNDS** \$ Billions % of \$18.44 Billion Source: IRMO, Weekly Status Report (1/2/2007)

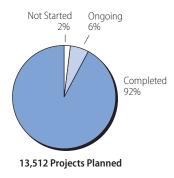


Percentages do not add up to 100% due to rounding.

STATUS OF IRRF FUNDS \$ Billions Source: IRMO, Weekly Status Report (1/2/2007); DoS, Iraq Weekly Status (9/27/2006)



Figure 2-3 STATUS OF IRRF PROJECTS Source: IRMO Rollup (12/30/2006); USAID Activities Report (December 2006)



Sector	Not Started	Ongoing	Completed	Total
Electricity	27	161	345	533
Oil and Gas		29	28	57
Water	28	146	927	1,101
Economic and Societal Development	113	102	7,997	8,212
Security and Justice	175	95	2,555	2,825
Health Care	1	145	88	234
Transportation and Communications	7	88	455	550
Total	351	766	12,395	13,512

STATUS OF IRRF 2 BY SECTOR^a (IN BILLIONS)

SECTOR	TOTAL ALLOCATION	TOTAL OBLIGATION	TOTAL EXPENDED
Electricity	\$4.24	\$4.09	\$2.95
Oil and Gas	1.72	1.63	1.29
Water	2.13	2.06	1.41
Economic and Societal Development	2.21	2.21	1.98
Security and Justice	6.31	6.28	5.67
Health Care	0.82	0.80	0.58
Transportation and Communications	0.80	0.79	0.54
Reconstruction Management	0.21	0.21	0.14
Total	\$18.44	\$18.07	\$14.56

^aThe "Status of the IRRF" analysis focuses only on the \$18.44 billion approved under P.L. 108-106 in November 2003, commonly referred to as IRRF 2. It does not include the \$2.48 billion approved under P.L. 108-11 in April 2003, commonly referred to as IRRF 1.

Source: IRMO, Weekly Status Report, 1/2/2007

TABLE 2-1

Highlights of IRRF Activities this Quarter

SIGIR makes these observations about the status of a number of sectors in the U.S. reconstruction program:

- During this quarter, the average peak capacity of electricity generation nation-wide fell below pre-war levels—4,260 vs.
 4,500 megawatts (MW). Because of interdictions on the northern transmission lines and the reluctance of local authorities in the south to send power, less electricity was available in Baghdad this quarter than before the 2003 conflict.
- This quarter, oil production fell below production targets of 2.68 million barrels per day (BPD) and nearly 2.17 million BPD for the entire quarter. Oil exports averaged 1.48 million BPD, which is less than the Iraqi goal of 1.65 million BPD.
- The Primary Healthcare Center (PHC) program continues to face challenges. To date, only eight Model PHCs have been completed, and seven are currently open. GRD-PCO reports that, of the 126 still under construction, 50 are 90–100% complete, and 46 are 75–90% complete.8

Iraq Security Forces Fund (ISFF)

As of December 31, 2006, almost 80% of the \$8.32 billion in FY 2005 and FY 2006 ISFF funds had been obligated, and 54% had been expended. An additional \$1.7 billion was appropriated under the Department of Defense Appropriations Act for FY 2007.9 Of the

425 projects funded by ISFF in FY 2005 and FY 2006, 189 have been completed, 231 are ongoing, and 5 have not yet started.¹⁰ Figure 2-4 shows the status of ISFF funds, which are allocated for projects in the security and justice sector only.

The goal of training and equipping 325,000 Iraqi soldiers and police officers was almost reached this quarter in the security and justice sector, and progress also continues in construction and rule-of-law activities.

However, the number of trained and equipped Iraqi Security Forces (ISF) should not be confused with the number labeled "present for duty." The number of soldiers and police who are present for duty is lower because of attrition, absence without leave, and scheduled leave. Concerns also remain about the effectiveness of the ISF and the ability of the Ministries of Defense and Interior to support them adequately.

OVERVIEW OF THE ISFF PROGRAM

In 2005, the ISFF program was established under P.L. 109-13 to allow the Commander of the Multi-National Security Transition Command-Iraq (MNSTC-I) to provide assistance to the ISF. According to P.L. 109-13, this assistance includes "the provision of equipment, supplies, services, training, facility and infrastructure repair, renovation, and construction." For the status of ISFF projects, see Figure 2-5.

Figure 2-4
STATUS OF ISFF FUNDS - SECURITY AND JUSTICE \$ Billions Source: DoD Secretary of the Army Update (12/31/2006)



Note: Totals are produced by combining financial detail from ISFF 2005 and ISFF 2006 funds.

Figure 2-5 STATUS OF ISFF PROJECTS Source: IRMO Rollup (12/30/2006)



Sector	Not Started	Ongoing	Completed	Total
Training and Operations	2	185	126	313
Infrastructure	3	21	51	75
Sustainment		19	10	29
Equipment and Transportation		6	2	8
Total	5	231	189	425

ISFF projects are compiled by totaling and grouping projects from both ISFF FY 2005 and ISFF FY 2006.

Commander's Emergency Response Program (CERP)

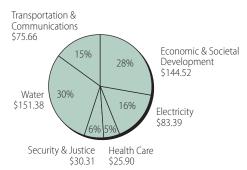
The most current data available for SIGIR's review of FY 2006 CERP funds and projects is dated September 30, 2006; more current information will be available next quarter.

Almost all of the \$511.16 million in CERP

FY 2006 funds was obligated as of September 30, 2006, and 29% had been expended. Also, 2,200 (57%) CERP FY 2006 projects had been completed, with an additional 1,598 (42%) ongoing. Only 26 projects have yet to start. For the status of CERP funds, see Figures 2-6 and 2-7.

Figure 2-6 **SECTOR SHARES OF FY 2006 CERP FUNDS** \$ Millions % of \$511.16 Million

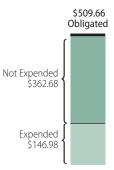
Source: Office of the Assistant Secretary of the Army Financial Management and Comptroller (9/30/2006)



1. Historically, SIGIR calculates sector share of funds by dividing dollars allocated for each sector by total dollars appropriated. Allocation detail at the sector and subsector level for CERP FY 2006 is currently unavailable; therefore, the percentages in this graphic are calculated using dollars committed. 2. For reporting consistency, CERP activities are mapped to SIGIR-defined sectors. See Appendix E for the CERP cross-reference.

STATUS OF FY 2006 CERP FUNDS

Source: Office of the Assistant Secretary of the Army Financial Management and Comptroller (9/30/2006)



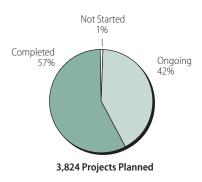
For reporting consistency, CERP activities are mapped to SIGIR-defined sectors. See Appendix E for the CERP cross-reference.

OVERVIEW OF THE CERP PROGRAM

The purpose of CERP is to help commanders quickly respond to urgent humanitarian issues in their areas of responsibility by implementing quick-turnaround projects that benefit Iraqis. Specifically, FY 2006 CERP aims to improve the Government of Iraq's (GOI) capacity to govern, keep critical infrastructure operational,

support economic strategies, minimize the effects of counter-insurgency operations on the Iraqi people, and promote secure elections with maximum participation.11 SIGIR has released two audits on the management of the CERP program: 05-014 (FY 2004) and 05-025 (FY 2005). For the status of sector projects funded by the CERP, see Figure 2-8.

Figure 2-8 STATUS OF FY 2006 CERP PROJECTS Source: Office of the Assistant Secretary of the Army Financial Management and Comptroller (9/30/2006)



Sector	Not Started	Ongoing	Completed	Total
Economic and Societal Development	5	498	614	1,117
Security and Justice	2	140	632	774
Water	3	382	323	708
Transportation and Communications	4	238	318	560
Electricity	5	234	188	427
Health Care	7	106	125	238
Total	26	1,598	2,200	3,824

Economic Support Fund (ESF)

The Emergency Supplemental Appropriations for FY 2006, P.L. 109-234, appropriated more than \$1.48 billion in bilateral economic assistance for the ESF. This funding is allocated

to Security (\$932 million), Economic (\$345 million), and Political (\$208 million) tracks. For the breakdown of these funds by track, see Table 2-2. 12

ECONOMIC SUPPORT FUND (MILLIONS)

SECURITY TRACK	AMOUNT
PRT/PRDC Projects	\$315
Infrastructure Security Protection (Oil, Water, and Electric)	\$277
PRTs Local Government Support	\$155
Community Stabilization Program in Strategic Cities	\$135
Community Action Program	\$45
Marla Ruzicka Iraq War Victims Fund	\$5
ECONOMIC TRACK	
Operations & Maintenance Sustainment	\$285
Capacity Development & Technical Training	\$60
POLITICAL TRACK	
Ministerial Capacity Development (USAID)	\$60
Ministerial Capacity Development (IRMO)	\$45
Regime Crimes Liaison Office	\$33
Democracy Funding for IRI, NDI, NED	\$25
Policy & Regulatory Reforms	\$20
Civil Society, ADF, IFES	\$18
USIP	\$4
Civil Society, IREX	\$3

TABLE 2-2



STATUS OF ELECTRICITY

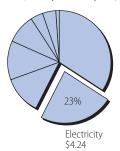
This review updates the status of U.S. reconstruction projects to restore Iraq's capacity to generate, transmit, and distribute electricity. SIGIR makes these observations about activities in the electricity sector this quarter:

- This sector receives the second-largest allocation (\$4.24 billion) of IRRF dollars. At the end of this quarter, 65% of planned IRRF-funded projects were complete, and 70% of the allocated dollars were expended. As of January 2, 2007, nearly 96% of allocations were obligated. For the status of IRRF funds in this sector, see Figure 2-9.
- U.S. projects have contributed 2,817 megawatts (MW)¹³ to Iraq's generation capacity. Actual peak production capacity this quarter was below pre-war levels (4,500 MW),14 averaging 4,260 MW.15 The average daily load served, however, is a better measure of how much power reaches Iraqis because it measures distribution over time.16 During this quarter, the daily load served averaged 90,614 megawatt hours (MWh),17 roughly 1,000 MWh above the past winter quarters of 2004 and 2005.
- Baghdad continues to receive fewer hours of power than the rest of the country, averaging 6.5 hours of power per day this quarter. Outside Baghdad, the measure of hours of power (12 hours) is greater than before the U.S.-led invasion.¹⁸ Daily electricity demand in Baghdad averaged approximately 2,200 MW this quarter.19

These are the challenges in the electricity sector this quarter:

- Insufficient operations and maintenance (O&M) allocations by the GOI continue to limit the sustainability of U.S.-funded projects as responsibility is transferred to Iraqi operators.
- Demand for electricity continues to outpace generation capacity, and operations at power plants continue to lack sufficient quantities of refined fuel to run generators at peak capacity.
- Sabotage of feeder lines limits the impact of U.S.-funded projects by reducing the hours of power that Iraqis receive in their homes and businesses.20

ELECTRICITY SECTOR AS A SHARE OF IRRF FUNDS \$ Billions % of \$18.44 Billion Source: IRMO, Weekly Status Report (1/2/2007)





IRRF-funded Activities in the Electricity Sector

During this reporting period, \$330 million was expended in this sector—up from \$270 million last quarter. Total expenditures in this sector are \$2.95 billion. As of January 2007, \$150 million²¹ was reported as not having been obligated. For the status of IRRF funds in this sector, see Figure 2-10.

In this sector, 27 U.S.-funded IRRF projects (5%) have yet to begin,²² and 65% have been completed. All but one project in this sector are scheduled to be completed by January 2008. All but two electrical generation projects have started, and 96% have been completed. Transmission projects are generally large, complex, expensive, and central to the grid system. The remaining distribution projects are generally smaller and less complex than the largescale generation and transmission projects. For the status of electricity projects by subsector, see Figure 2-11.23

bution and transmission systems to ensure that power reaches Iraqi homes. As of September 30, 2006, approximately \$67 million of the total commitment of \$84 million had not been expended; approxi-

The electricity sector receives 16% (roughly

\$84 million) of the committed CERP FY 2006

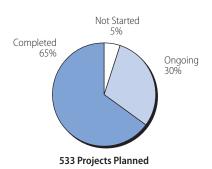
support local efforts to repair electrical distri-

projects funds. Most CERP-funded projects

STATUS OF IRRF FUNDS - ELECTRICITY Source: IRMO, Weekly Status Report (1/2/2007); DoS, Iraq Weekly Status (9/27/2006)



STATUS OF IRRF ELECTRICITY PROJECTS Source: IRMO Rollup (12/30/2006) USAID Activities Report (December 2006)

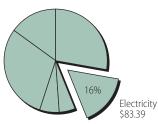


Sector	Not Started	Ongoing	Completed	Total
Distribution	13	123	283	419
Transmission	12	33	12	57
Generation	2		50	52
Automatic Monitoring & Control System		5		5
Total	27	161	345	533



ELECTRICITY AS A SECTOR SHARE OF FY 2006 CERP FUNDS \$ Millions

% of \$511.16 Million Source: Office of the Assistant Secretary of the Army Financial Management and Comptroller (9/30/2006)



mately \$17 million was used to complete 188 of the 427 planned projects. An additional 234 projects were ongoing, and 5 projects had not started.24 For the status of CERP funds, see Figure 2-12.

Key Projects Completed and Underway

The U.S. reconstruction program funds three major types of projects in the electricity sector:

- Generation facilities produce power for the system.
- Transmission networks carry that power across the country.
- Distribution networks deliver the transmitted power to local areas, homes, and businesses.

Seven U.S. projects,²⁵ valued at \$109 million, will provide an automated monitoring and control system for selected strategic portions of the electric grid. The Supervisory Control and Data Acquisition system (SCADA) is nearing completion; 95% of the materials have been procured, and 90% have been installed.26



New electrical panel at the Al-Doura Power Plant. This plant has the potential to serve 1.5 million people in Baghdad.

GENERATION FACILITIES

Iraq's electricity sector suffers from aging and poorly maintained infrastructure; more than 85% of Iraqi power plants are over 20 years old. All remaining U.S.-funded generation projects to improve the condition of these facilities are expected to be finished by September 2007, except the computerized maintenance management system, which is scheduled to be completed in April 2008.²⁷ The Al-Doura Power Plant will add 280 MW to the power grid, potentially serving more than 1.5 million people in the Baghdad area.28

Many of the sector's remaining generation projects address sustainability. Three of five planned projects at the Baiji Power Plant (\$59 million) are complete. The two remaining



ELECTRICITY OUTPUT OF U.S. PROJECTS

CURRENT U.S. CONTRIBUTION, AS OF DECEMBER 30, 2006

TOTAL PLANNED U.S. **CONTRIBUTION**

U.S. PROGRESS TOWARD **END-STATE GOAL**

2,817 MW

3,710 MW

Source: DoS NEA-I electricity expert, response to SIGIR, January 16, 2007. Note: The GAO report, "Securing, Stabilizing, and Rebuilding Iraq: Key Issues for Congressional Oversight," reports that U.S. projects have added an estimated 2,093 MW, January 2007, p. 73.

TABLE 2-3

projects—repairs to mobile engines and combustion inspections for gas turbine engines—will help sustain 320 MW of generation capacity. Work at Baiji was estimated to be completed by June 6, 2006. A delay occurred because the mobile engine repair contractor was removed, and a new contractor began work. The combustion inspection remains on schedule, with additional work added. In September, the original contract was modified to include three inspections of gas turbines. Ongoing generation work at Baiji Power Plant is scheduled to be completed by March 2007.²⁹

TRANSMISSION NETWORKS

Eight transmission projects started construction this quarter; 12 transmission projects (\$217 million) have been completed to date, and 46 projects (\$683 million) are in progress. All projects remaining have started design, procurement, and pre-mobilization work, except the Kirkuk-Diyala 400 kV project for overhead lines, which was delayed to accommodate the Ministry of Electricity's schedule.³⁰ The first 13 towers were built this quarter for the 400 kilovolt (kV) Baiji-Haditha-Qaim **Transmission Line Project.** There are 344 towers on the Baiji-Haditha route and 229 along the Haditha-Qaim line.31

DISTRIBUTION NETWORKS

Distribution projects are crucial to getting generated power into Iraqi homes. This quarter, the remaining 155 of 411 programmed projects are in progress at a cost of \$327 million; the total budget is \$712 million.³²

Outputs of IRRF-funded **Electricity Projects**

The outputs of U.S.-funded electricity projects are measured by generation capacity added to the grid in MW. To compare the current U.S. contributions with the U.S. goal for contributions, see Table 2-3. U.S. reconstruction projects have contributed 2,817 MW of generation capacity.

The quarterly average for peak generation was below pre-war levels. This decrease can be attributed partly to the seasonal nature of electricity production—generation units are taken off-line for maintenance during the winter. It can also be attributed to attacks on infrastructure, aged equipment, lack of adequate fuel supply, and poor management. The current generation level, which averaged 4,260 MW for this quarter, is below both the pre-war level of 4,500 MW and the U.S-Iraqi goal of 6,000 MW.³³ Table 2-4 compares pre-war levels with the GOI goal set in July 2006 and this quarter's average.



CURRENT ELECTRICITY GENERATION CAPACITY VS. PRE-WAR LEVEL (MEGAWATTS)

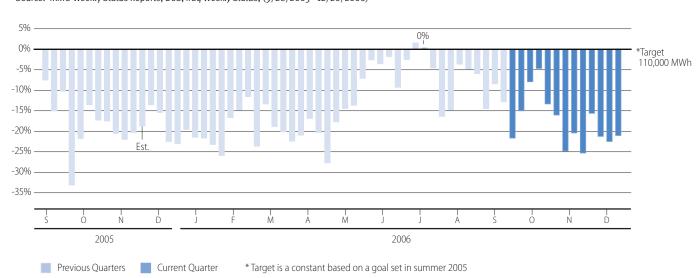
OUTPUT METRIC	Pre-war Level, as of March 2003	U.SIraq Goal for July 2006	Quarter Average
Generation Capacity	4,500	6,000	4,260 MW

Source: Pre-war level: UN/World Bank Joint Iraq Needs Assessment, 2003, p. 28. Note: GAO recently reported the pre-war level as 4,300 MW (GAO Report 06-697T, April 25, 2006, p. 19). Goal: Joint U.S.-Iraqi Electricity Action Plan, March 12, 2006, p. 2. Current Status: IRMO, Weekly Status Report, July-September 2006.

TABLE 2-4

Figure 2-13 **ELECTRICITY LOAD SERVED**

Weekly Average Electricity Load Served, Megawatt Hours (MWh) Source: IRMO Weekly Status Reports, DoS, Iraq Weekly Status, (9/28/2005 - 12/26/2006)



Outcomes of IRRF Projects

Although outputs in this sector are measured by MW contribution, outcomes are measured by MW hours and hours of power available to Iraqi consumers. This quarter, the average load served of 90,614 MWh34 per day was a slight gain from the winter quarters in 2004 (86,376

MWh) and 2005 (89,785 MWh). However, this was lower than the pre-war level of 98,000 MWh and nearly 20,000 MWh short of the Iraqi target of 110,000 MWh set during the summer of 2005.35

Figure 2-13 shows the weekly average electricity load served in megawatt hours.



CURRENT OUTCOMES VS. PRE-WAR LEVELS AND GOALS

OUTCOME METRIC	Pre-war Level	IRAQ GOAL FOR JULY 2006	DAILY AVERAGE, LAST WEEK OF DECEMBER 2006
Iraq Hours of Power/Day	4-8	12	12
Baghdad Hours of Power/Day	16-24	12	6.5

Sources: Pre-war level: DoS Briefing by U.S. Embassy Baghdad, November 30, 2005; Goals: Joint U.S.-Iraqi Electricity Action Plan, March 12, 2006, p. 2.; Current Status: DoS, *Iraq Weekly Electricity Report*, December 27, 2006, p. 14.

TABLE 2-5

Distributing power from generation facilities to Iraqi homes remains a major challenge. For the hours of power available to Iraqis compared to pre-war levels, see Table 2-5. Multiple challenges in this sector associated with distributing and transmitting power have left Iraqi consumers frustrated by the low and inconsistent supply of electricity.

Baghdad averaged only 6.5 hours of power per day this quarter because of attacks on power lines that feed the capital, as well as political issues inhibiting the transfer of power from large plants in both northern and southern Iraq. Baghdad does not have enough power plants to meet its own needs.

In the north, sabotage and weather-related damage of transmission lines have prevented the transfer of power to Baghdad. In addition, Baghdad has received no power from the Haditha Dam since December 4, 2006.³⁶ The dangerous security situation has delayed or prevented repairs.

In the south, contentious relationships between the "recently empowered provincial authorities and the centrally managed electricity authority" account for major disparities in the rationing and distribution of electricity supplies between the south and Baghdad.³⁷

This resistance to power-sharing has resulted in Baghdad averaging 4-8 less hours of power daily than in other parts of the country.³⁸ To decrease Baghdad's long-term reliance on power transfers from the rest of the country, the GOI plans to expand generation connected directly to the Baghdad loop to include more generation facilities.³⁹

Private generators are used throughout Baghdad to meet the gap between supply and demand. As SIGIR reported last quarter, high demand is attributable to government subsidies, a growing economy, and a surge in the consumer purchases of appliances and electronics.⁴⁰

Because the GOI struggles to distribute power equitably and reliably, SCADA is being constructed to maximize the availability of electricity across Iraq. Six of the seven SCADA projects are underway. The system is projected to cost \$109 million and is estimated to be completed by April 2007. All SCADA is expected to limit the number of power outages by increasing automation and implementing control mechanisms. All GRD-PCO notes that SCADA is also expected to accomplish these goals:



- Increase system safety by preventing damage from overloads.
- Allow the Ministry to react faster to incidents mitigating regional effects.
- Increase controls for a more accurate and reliable system.
- Facilitate equitable distribution across the country.
- Reduce system upsets during rolling blackouts.

The goals of stabilization and equalization are two separate issues for the Iraqi power system.43 As GRD-PCO notes, SCADA will help with system stability, but Iraqi officials will determine whether power is shared equally. Although SCADA will contribute to both equalizing and stabilizing power in Iraq, the Iraq Reconstruction Management Office (IRMO) reports that it is not the sole solution to both problems. Equalization and system stability can be achieved only when generation capacity exceeds demand.44

This quarter, unplanned power outages accounted for nearly 2,000 MW of lost production per day. The Ministry of Electricity estimates that it has not met 1,000 MW of capacity because fuel is unavailable.⁴⁵ An additional 925 MW were lost to planned outages for upgrades, repairs, maintenance, fuel shortages, and load shedding. Load shedding is a form of rationing: power is turned off for set amounts of time to mitigate the gap between supply and demand.46

Figure 2-14 shows the distribution of power throughout the country in relation to the hours of power by governorate.

Challenges

Major challenges in this sector include developing the capacity to fund O&M projects, meeting rising demand, mitigating fuel shortages, and securing infrastructure.

IRAQI FUNDING ISSUES

In December 2006, the Ministry of Electricity submitted its 2007 budget to the Cabinet for approval. The \$2.8 billion draft budget is a three-fold increase from the \$840 million budgeted in 2006, but falls well short of the \$5 billion that Iraqi and IRMO officials estimate is needed for capital requirements (\$3.5 billion) and O&M (\$1.5 billion).47 The Department of State (DoS) notes that the Ministry of Electricity has improved its ability to spend its capital budget because it is better able to follow the Ministry of Finance's funding procedures. In addition to funding issues, coordination linkages between the Ministry of Electricity and the Ministry of Finance remain unsettled.⁴⁸

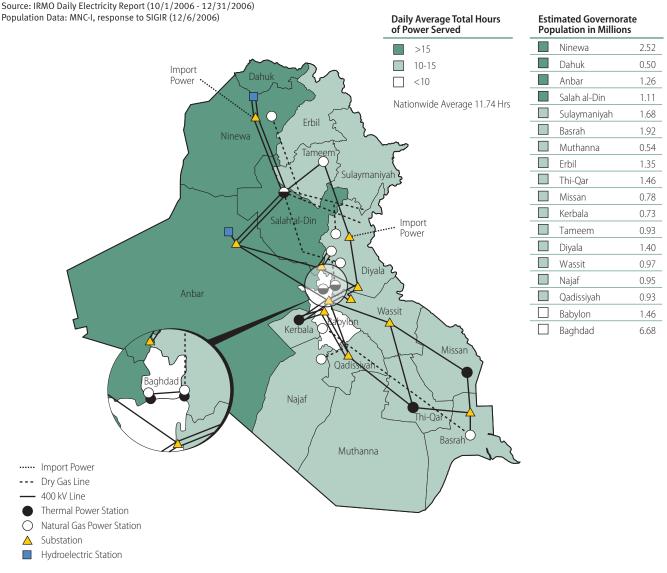
As SIGIR reported last quarter, when U.S. funding for O&M programs ends and responsibility for IRRF-funded projects shifts to the GOI, this sector will face a significant O&M challenge. Along with O&M funding shortfalls, a major concern is that O&M continues to work on a "break-down basis with resulting unreliable operations."49 These U.S. programs are intended to build O&M capacity at the Ministry of Electricity:

Last quarter, SIGIR reported that a nationwide long-term O&M support program had begun. Over the summer, a contractor was chosen to provide support for the \$81

SECTOR SUMMARIES



Figure 2-14 **ELECTRICITY DISTRIBUTION AND HOURS OF POWER**



million program,⁵⁰ which aims to help the Ministry of Electricity develop, implement, and sustain an effective O&M plan. The contractor will help provide O&M services at thermal and gas turbine power plants.

 FY 2006 ESF provided an additional \$278.6 million for O&M in the electricity sector.⁵¹ As of December 2006, \$308 million was programmed for Operations, Maintenance, and Sustainment (OMS); 21 projects (\$288 million) are in progress; and 5 (\$20 million) are complete. The OMS program is scheduled to finish by October 2007.⁵²



RISING DEMAND

Demand for electricity continues to surpass Iraq's peak generation capacity—8,122 MW were demanded on average this quarter, compared to a peak generation average of 4,260 MW.53 U.S.-funded generation projects have contributed 2,817 MW54 of capacity to Iraqi daily electricity output through construction, repairs, and modifications to power stations.⁵⁵ The U.S. Department of Energy (DoE) estimates Iraq's long-term generation capacity need at 18,000 MW.56 This quarter, Baghdad is experiencing electricity demands averaging 2,200 MW per day.⁵⁷ These are the main issues associated with electricity demand in Iraq:

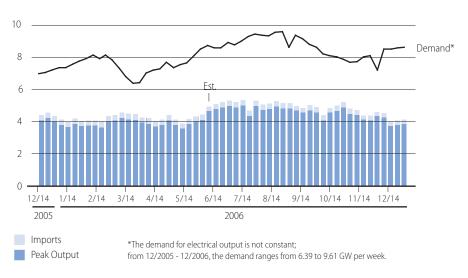
The high demand can be attributed to government subsidies, a growing economy, and a surge in the consumer purchases of appliances and electronics. The Minis-

try of Finance has advocated eliminating subsidies on electricity, which would raise rates and increase government revenue. Unreliable distribution, however, provides consumers with a disincentive to pay for service.58

- Iraqi electricity expectations continue to go unmet, as hours of power inside Baghdad remain below pre-war levels. The GOI has set a goal to achieve 12 hours of power per day.59
- Attacks on the electricity network—particularly the power lines—are cutting the capability to deliver electricity to the Baghdad loop; more than 80 transmission towers along the Baiji-Baghdad West #2 line are down from attack.60 Baghdad receives very little power from generation plants in the north.61

Figure 2-15 shows the generation capacity versus demand.

ELECTRICITY DEMAND VS. CAPACITY Weekly Average Gigawatts (GW) Source: IRMO, Weekly Status Reports (12/14/2005 - 12/26/2006)





FUEL SHORTAGES

Insufficient supplies of fuel and water led to a loss of nearly 1,500 MW in production per day this quarter; the issue of fuel and water supply grows more critical as new generation projects come online.⁶² As SIGIR reported last quarter, the solution to fuel shortages requires coordination between the Ministries of Oil and Electricity, but joint discussions have not yet produced a coordinated plan. Figure 2-16 shows a breakdown of unmet fuel and water needs at power plants by type of generation

facility. The supply of fuel and water fluctuate from week to week, leading to inconsistent power production and service. These factors contribute to the challenge of fuel shortages throughout Iraq:

 Less-than-optimal fuel causes a more rapid deterioration of parts, more frequent maintenance, more pollution, and more costs.
 U.S. reconstruction projects have installed 35 natural gas turbines in generation plants throughout Iraq. However, 16 of these 35 turbines use crude or heavy fuel oil instead of natural gas.

Figure 2-16

UNMET ELECTRICITY PRODUCTION CAUSED BY WATER AND FUEL SHORTAGE

Megawatts (MW), Weekly Average

Source: IRMO Daily Electricity Report (10/1/2006 - 12/26/2006)

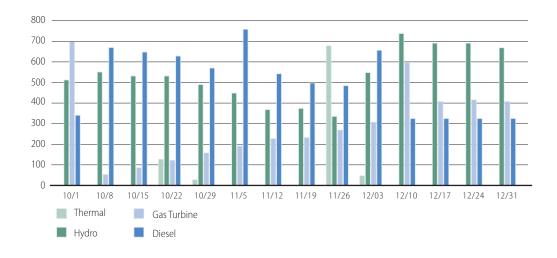
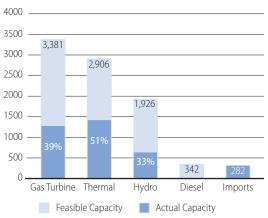




Figure 2-17 **ACTUAL VS. FEASIBLE ELECTRICITY PRODUCTION**

Megawatts (MW)

Source: IRMO Daily Electricity Report (10/1/2006 - 12/31/2006)



- 1. Diesel power produced only 233 MW, less than 1%
- of the total feasible production.
- 2. Imported power provides less than 1% of Iraq's electricity.

IRMO estimates that Iraq could save \$4 billion each year by initiating programs to transfer flared natural gas to power plants for electricity production.

As Figure 2-17 demonstrates, 61% of feasible capacity at gas turbine facilities that produce electricity goes unmet. Gas turbine plants lose nearly 2,000 MW production because heavy fuel oil is used instead of natural gas.

SECURITY

The lack of security continues to challenge the electricity sector, leading to project delays and increased costs for security services. 63 A major concern is protecting linear assets, particularly

transmission lines.64 Last quarter, a SIGIR audit (SIGIR-06-038) noted that \$216.2 million went to improve Iraq's capacity to protect its electricity infrastructure. IRMO and the Ministry of Electricity continue to take steps to improve data on attacks on electricity infrastructure. The audit found that attack rates varied between January 2005 and April 2006, but they were down from April to June 2006. A DoS oil expert cautioned against drawing conclusive links between the number of attacks and energy supply, because strategic attacks although they may occur less frequently—can have equally debilitating effects.⁶⁵ Repair teams sent in after attacks continue to face threats, including kidnapping and murder.66

SECTOR SUMMARIES



STATUS OF OIL AND GAS

This review updates the status of reconstruction projects designed to increase Iraqi oil production and exports, improve natural gas production, and enhance critical fuel-refining capabilities. Project work in this sector is designed to maintain major production fields and to repair key facilities and infrastructure.

Although U.S.-funded projects have helped increase crude oil production capacity and exports, a number of issues continue to pose significant challenges to sustained development in this sector, including the deteriorating security situation, inadequate maintenance, insufficient sustainment processes, continued corruption, and an inefficient budget execution process.

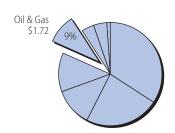
SIGIR makes these observations about activities in the oil and gas sector this quarter:

- As of January 2, 2007, 1.63 billion of the sector's \$1.72 billion allocation was obligated, and \$1.29 billion had been expended (75%).⁶⁷ Figure 2-18 shows this allocation as a percentage of total IRRF funding.
- In 2006, Iraqi crude oil production increased slightly over 2005, averaging 2.12 million barrels per day (BPD) for the year. This quarter, output dipped to 1.86 million BPD⁶⁸ for one week in early November and averaged 2.17 million BPD⁶⁹ for the quarter. Iraq has missed its quarterly production target every quarter since 2004.

- End-of-year numbers show that the daily average of exported crude oil in Iraq increased by more than 150,000 BPD from 2005, but still fell short of the GOI export goal of 1.65 million BPD. This quarter, exports averaged 1.48 million BPD.
- Imports of refined fuels, particularly kerosene and diesel, have increased; nevertheless, supply still will not meet this winter's demand.
- The Ministry of Oil reached a milestone by installing meters at the Al Basrah Oil Terminal in January 2007.

Figure 2-18 OIL AND GAS SECTOR AS A SHARE OF IRRF FUNDS \$ Billions % of \$18.44 Billion

Source: IRMO, Weekly Status Report (1/2/2007)





SIGIR sees these key challenges facing the oil and gas sector this quarter:

- Slow budget execution continues to increase pressure on an already stressed infrastructure. The proposed GOI 2007 budget allocates \$2.4 billion to the Ministry of Oil for capital projects, a drop of 33% from last year's \$3.6 billion budget.⁷⁰
- An insurgent attack on a refined fuel pipeline in the south increased security concerns about the ability of Iraqi forces to protect linear infrastructure.
- The GOI is developing national hydrocarbon legislation, which will create policy for sharing oil revenue, establish a new Iraqi state oil company, and define the regulatory role of the Ministry of Oil.⁷¹ Currently under consideration by the Council of Ministers, the law is not expected to reach the Council of Representatives until March 2007 at the earliest.

IRRF-funded Activities in the Oil and Gas Sector

All U.S. construction projects in this sector are scheduled to be completed by the end of July 2007.72 For a summary of U.S.-funded construction projects to date, see Figure 2-19.73

At the start of January 2007, \$1.29 billion of the \$1.72 billion allocation had been expended. This quarter, \$150 million was expended. Figure 2-20 shows the status of sector funds.

IRRF-funded Project Status

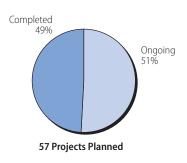
Currently, 182 projects are planned in this sector—125 non-construction and 57 Engineering, Procurement, and Construction (EPC) projects.⁷⁴ For the completion status of non-construction and EPC projects as of the end of this quarter, see Table 2-6.



Pipeline construction in northeastern Iraq.

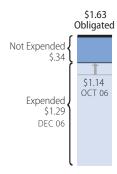


Figure 2-19 **STATUS OF IRRF OIL AND GAS PROJECTS** Source: IRMO Rollup (12/30/2006); USAID Activities Report (December 2006)



	Not			
Sector	Started	Ongoing	Completed	Total
Water Injection Pump Station		10	9	19
Southern Region Projects		13	6	19
Northern Region Projects			9	9
Dedicated Power		1	2	3
LPG/LNG Plant Refurb		5	1	6
General Projects			1	1
Total		29	28	57

STATUS OF IRRF FUNDS - OIL AND GAS \$ Billions Source: IRMO, Weekly Status Report (1/2/2007); DoS, Iraq Weekly Status (9/27/2006)



Non-Construction vs. EPC Project Status Summary

Түре	TOTAL PROJECTS	Not Started	Ongoing	COMPLETED
Non-construction	125	0	53	72
EPC	57	0	29	28

Non-construction source: USACE-GRD, Bi-weekly Situation Report, December 25, 2006, p. 13.

TABLE 2-6



Key Oil and Gas Projects Completed and Underway

Most construction initiatives in the oil and gas sector have focused on production and exportation, but some projects have also helped rehabilitate refining and gas facilities. Figure 2-21 shows the critical oil and gas infrastructure across Iraq, including the country's 4,350-mile-long pipeline system.

In the north, the Baiji-Kirkuk Pipeline is the major route by which crude oil reaches the refineries at Baiji. The four pipelines of this route are frequently attacked. The Baiji-Ceyhan Pipeline, also known as the Iraq-Turkey Pipeline (ITP), is the major export route for crude oil from the northern fields. Oil exports in the north have been significantly limited because pipelines have been inoperative for most of the reporting period.

For the pipeline routes from Kirkuk to Baiji and Baiji to Turkey, as well as the major oil routes linked to the Rumaila fields in the south, see Figure 2-21.

The Al Basrah Oil Terminal (ABOT) task order was 48% complete as of December 29, 2006. 75 As of December 2006, 6 of the 14 projects under this task order had been completed. This task order focuses on sustainability operations. 76 The work underway on this task order has suffered chronic schedule slippages. On November 19, 2006, SIGIR made an initial inspection of rehabilitation work at ABOT. A SIGIR report detailing the extensive rehabilitation work and the challenges faced in performing the work at ABOT is scheduled to be issued in March 2007.

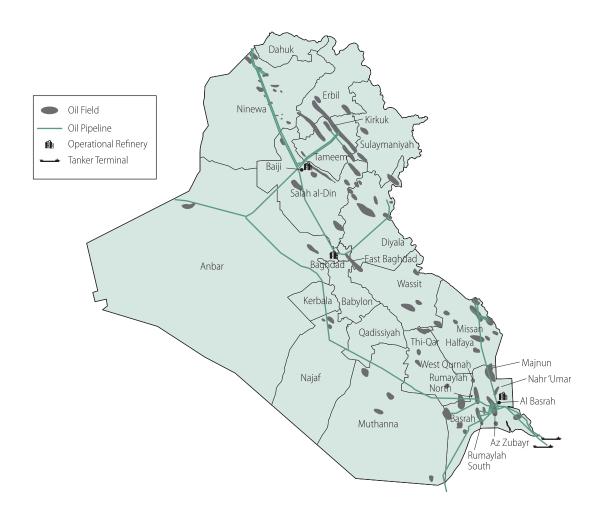
This quarter, the Ministry of Oil met a milestone, installing meters at ABOT on January 15, 2007. The start of the project had been delayed because the shutdown deprives the GOI of its main source of income—oil exports—while work is being completed.⁷⁷ IRMO recommended against the ABOT shutdown, arguing that ABOT loading berths already feature turbine and positive displacement meters. IRMO also noted that "changing from one metering device to another does not warrant shutting down the platform."78 However, the 2004 International Advisory and Monitoring Board (IAMB) for the Development Fund for Iraq (DFI) recommended that metering equipment be expeditiously installed.⁷⁹ In addition, the International Monetary Fund (IMF) Stand-By Arrangement with Iraq states that the GOI will work "to install a metering system by end-2006" to meet international quality assurance standards.80 The estimated completion date for the ABOT task order is May 2007.81

Last quarter, SIGIR reported that 12 gas-oil separation plants (GOSPs) were undergoing refurbishments throughout southern Iraq to increase crude oil processing capacity by 600,000 BPD. Seven of the eight GOSP projects in the north have been completed, increasing crude oil processing capacity by 300,000 BPD. Six of the 12 GOSP projects in the south are completed. The overall task order is nearing completion and is expected to be finished by February 2007. Six

The refurbishment of the **Shuaiba Refinery Power Plant** in Basrah was completed in



Figure 2-21 **GAS AND OIL INFRASTRUCTURE BY GOVERNORATE** Source: CIA Country Profile Map



November 2006. This project was designed to improve the continuous long-term power supply to the Basrah Refinery. GRD-PCO reported that a training project for plant operators is also complete.84

The Qarmat Ali project is designed to provide treated water for injection wells to maintain oil reservoir pressure and to help sustain production levels in one of the largest southern oil fields. Phase I is complete. Phase II is currently 30% complete, and GRD-PCO reports that it is scheduled to be finished by the end of July 2007 although the original completion date was December 2006.85 This delay stems from an assessment of equipment that revealed a need for replacement parts. GRD-PCO notes that project costs will increase because of this additional procurement, but does not state by how much.



Phase II of the **Qarmat Ali** task order is expected to increase water injection to full capacity, resulting in a crude oil production increase of 200,000 BPD. Research completed by several leading international oil companies, however, questioned whether water injection was the proper technique to boost production in some of the Rumaila fields. IRMO has previously cited significant pre-war deterioration in these fields and questions the potential benefit of continued water injection; oil company reports instead recommend the use of artificial lift pumps or gas injection.⁸⁶

The **South Well Workovers** project in the Basrah governorate began on August 1, 2006, and has made steady progress; the project is now 27% complete. This project aims to refurbish wells throughout the governorate, including the workover of 30 wells in the Rumaila fields and completion and replacement of tubing in an additional 30 wells in West Qurna. GRD-PCO reports increased investment in this area because workovers were viewed as a higher priority than storage projects and similar projects.87 GRD-PCO reports that a logistics issue dealing with the delivery of chemicals has been solved and that the project may still meet its original completion date of April 2007.88

To date, \$359 million has been allocated for engineering and procurement projects, \$17 million for government procurement, \$11 million for capacity-development initiatives for operating company personnel, and \$506 million for administrative task orders.⁸⁹

Outputs of IRRF-funded Oil and Gas Projects

Output in this sector is measured in barrels as a daily average per month, and U.S.-funded projects in this sector aim to help the GOI achieve the current production target of 2.68 million BPD. This quarter's average was 2.17 million BPD, more than 500,000 BPD below the target. This quarter's production averages, however, are nearly 200,000 BPD greater than the fourth quarter of 2005.

Over the summer, IRMO warned that gains from rehabilitation projects would "be overtaken by production losses in the near future due to inadequate expenditures for maintenance and lack of replacement of critical parts, material, and equipment if nothing is done to change the current constricting budgetary system for the Ministry of Oil." These sustainment issues persist despite U.S.-funded attempts to improve Iraqi capabilities in these areas.



Outcomes of IRRF-funded Oil and Gas Projects

The major outcome of U.S.-funded projects in this sector is revenue generated by increased crude oil exports. Table 2-7 presents reconstruction project metrics against pre-war levels and U.S. and Iraqi end-state goals.

The 2006 GOI budget anticipated an average crude oil production of 2.3 million BPD, with revenues generated from an estimated 1.65 million BPD exported at an estimated price

of \$46.60.91 Despite increasing its crude oil production target from 2.5 million BPD to 2.68 million BPD, the GOI has decreased its estimated 2007 crude oil production average to 2.1 million BPD. Figure 2-22 shows a crude oil production breakdown between the northern and southern oil fields, and figure 2-23 shows crude oil production nationwide. As the GOI struggles to stabilize services, pay employees, and foster economic development, officials look to the oil and gas sector to boost govern-

CURRENT OIL AND GAS PROJECT BENEFITS VS. PRE-WAR LEVEL AND GOAL

OUTCOMES METRICS	Pre-war Level (2003)	Quarter Average	U.S. End-state Goals	Iraqi End-state Goals
Oil Production Capacity (million BPD)	2.8	2.68	3.0	2.8
Oil Production (Actual) (million BPD)	2.58	2.17	Not Available	2.8
Export Levels (million BPD)	Not Available	1.48	2.2 (capacity)	1.65
Natural Gas Production Capacity (MSCFD)	Not Available	730*	800	Not Available
LPG Production Capacity (TPD)	Not Available	1,700*	3,000	Not Available

^{*}Data for these figures is taken from a GRD-PCO report of December 1, 2006, and does not constitute a full quarterly average.

Sources: Pre-war numbers—DoE Country Analysis Brief, meeting with DoE officials on May 31, 2006. Quarter Average—IRMO Monthly Import and Export Production, January 6, 2007.); DoS, *Iraq Weekly Status* reports, July-October, 2006 (oil production and exports); GRD-PCO, "Sector Consolidated Results Update Meeting," September 10, 2006, p. 3 (natural gas production capacity and LPG production capacity). U.S. end-state goals—GRD-PCO, "Iraq Reconstruction Report," October 5, 2006, p. 3 (production capacity); DoS, response to SIGIR, July 24, 2006 (export capacity); Iraqi end-state goals—meetings and discrepance of the production of the produc and discussions with DoS officials for April 2006 Quarterly Report; DoS, IRMO Weekly Status Report, May 16, 2006, p. 9 (Iraqi export target).

TABLE 2-7



ment coffers through crude oil exports. For 2006, DoS projected oil revenues in Iraq to reach \$31.3 billion, an increase of \$7 billion from 2005. The proposed 2007 budget estimates revenues of \$32.7 billion from an export average of 1.7 million BPD;⁹² an additional \$1.7 billion in non-oil revenues is also projected. For Iraq's export trends throughout the year, see Figure 2-24.

EXPORTS

U.S.-funded projects have added capacity to Iraq's oil export industry, the backbone of the Iraqi economy. Oil revenue constitutes almost 93% of total export earnings. However, last quarter, a SIGIR audit (06-038) estimated that \$16 billion in oil export revenue was lost over the past three years because of attacks,

poorly maintained infrastructure, and criminal activity.⁹⁴

The oil and gas sector's improved export performance for 2006 is attributed to GOSP refurbishments, occasional flows of crude oil through the ITP, and rehabilitation work on the loading arms at the southern offshore loading berths. This quarter, exports averaged 1.4895 million BPD for the quarter and closed the year averaging 1.51 million BPD.

As Figure 2-24 shows, revenue is related to exports and the price of crude oil in the global market.

Iraq also faces sustainability issues with its domestic export capacity, even though activities to further boost exports continue:

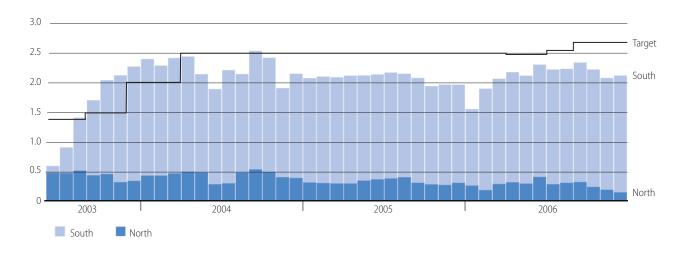
 In the north, Iraqis expected that the completion of the 40-inch crude oil pipeline would increase northern exports.⁹⁶

Figure 2-22

CRUDE OIL PRODUCTION BY REGION

Millions of Barrels Per Day, Monthly Average

Source: IRMO Monthly Import, Production, and Export Report (December 2006)





MONTHLY CRUDE OIL PRODUCTION Millions of Barrels Per Day (MBPD) Source: IRMO Monthly Import, Production, and Export Report (December 2006)

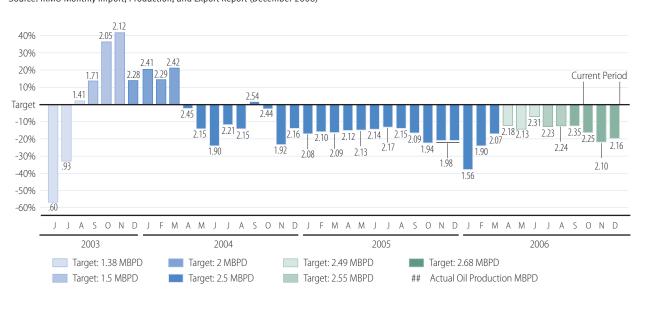


Figure 2-24 MONTHLY CRUDE OIL EXPORTS AND REVENUE RAISED

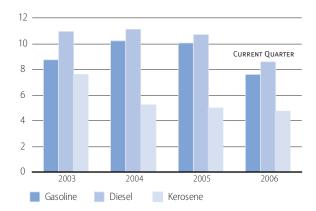


SECTOR SUMMARIES



WINTER FUEL REFINERY PRODUCTION (2003 - 2006)

Source: IRMO Monthly Import, Production, and Export Report (12/2006)



Note:

This guarter, winter 2006, refined fuel production is the lowest it has been (compared to other winters) since the U.S.-led invasion in 2003. Refined fuels include kerosene (to heat homes), gasoline (to fuel automobiles) and diesel (to power electricity generators).

Insurgent attacks, looting, and maintenance issues along the ITP pipeline, however, continue to prevent significant flows of crude oil to Ceyhan.

In the south, recently refurbished loading berths at ABOT have improved the efficiency of tanker loadings. Khor al-Amaya Oil Terminal also resumed partially loading crude oil tankers97 on November 22 after Iraqi workers repaired the damage caused by a major fire that occurred earlier this year.98

As SIGIR has previously reported, Iraq relies heavily on ABOT for exports, particularly when the northern pipeline system is down. This severe export burden increases the southern system's susceptibility to longstanding vulnerabilities, including low storage capacity, volatile winter weather in the Persian Gulf, and interdictions. This quarter, IRMO reported that one of the southern pipelines that carries residual fuel to the Mussayib power plant and Daura refinery was hit with rockets, one of which impacted the pipeline manifold. This is the first time in several years that an attack was launched on this pipeline.99

REFINING

Although Iraq has enormous reserves of crude oil, the nation lacks the domestic refining capacity to supply its population with enough refined fuels for heating homes, fueling automobiles, and powering factories. Iraq's inability to meet domestic demand forces the GOI to import kerosene, gasoline, diesel, and liquefied petroleum gas (LPG), the primary refined fuels consumed by the Iraqis. Iraq is estimated to need 18 million liters per day of kerosene to meet winter supply needs, and imports have averaged 4 million liters, leaving a large demand gap this winter. 100

Figure 2-25 shows the status of Iraq's refined fuel production.

Iraq faces both short-term and long-term challenges in the refined fuels industry. In the short term, Iraq relies heavily on its neighbors to help address domestic demand, especially Turkey for refined fuel imports. Consequently, procuring, transporting, and storing imported fuel are three major challenges that Iraq faces in the refining subsector.

Procuring refined fuel is complicated by large unpaid debts to the countries Iraq relies



on for refined fuel imports. Turkey holds the bulk of Iraq's debt and is also the leading source of Iraq's imported refined fuel. On November 21, 2006, Iraq paid \$80 million to Turkey, which followed another \$80 million payment in October. The GOI requested and received an additional \$800 million from the Council of Representatives to continuing purchasing refined products because it does not budget for fuel imports.101

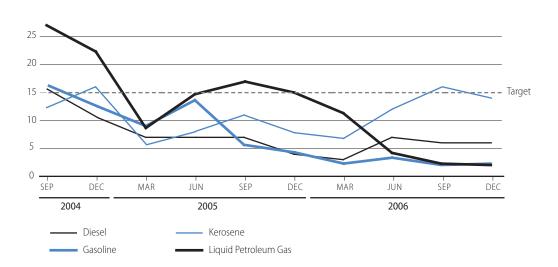
Transporting refined fuel imports from Turkey into the market remains cumbersome, particularly because these shipments are moved by truck from the border. In preparing for shortages of refined fuels during the winter months, several Iraqi governorates have signed deals with neighboring countries to import kerosene, including Iran. This quarter, Iran

signed an agreement with Kurdistan to supply 2 million liters of kerosene per day. 102

Storing LPG, diesel, kerosene, and gasoline throughout Iraq remains insufficient, especially at refineries. Attacks, threats, and insufficient storage capacity for refined fuel have led to the repeated shutdown of the Baiji refinery.¹⁰³ Also, DoS reports that some refined fuel storage facilities are under insurgent control. 104 To address distribution in Baghdad, the security plan includes the renovation of 18 gasoline stations.105 Figure 2-26 shows the average days of refined fuels in storage.

To help alleviate repeated shortages and provide a stable supply of refined fuels in the future, the GOI has sought to improve its refining capacity. On October 7, 2006, it inaugurated a small refinery in Najaf with

Figure 2-26 **QUARTERLY AVERAGE INVENTORY OF CRITICAL REFINED FUELS** Quarterly Average Days of Stock Source: DoS, Iraq Weekly Status (9/2004 - 12/2006)





a capacity of 10,000 BPD.106 Although new, this refinery lacks adequate storage capacity and has been inactive because of an inability to transport residual fuel via truck or pipeline. 107 Plans are also underway to upgrade two main refineries and construct another two in northern and central Iraq. 108 However, Iraq will continue to face refined product deficiencies until it addresses issues of pricing, import restrictions, and insufficient domestic refining capacity.

Challenges

Projects in this sector continue to face a number of challenges, including difficulties with budget execution, attacks on key infrastructure, corruption, smuggling, and ensuring the sustainability of operations.

SECURITY

The challenge of providing security for oil facilities and installations continued throughout this quarter. DoS reported that the lack of security is a serious challenge to increased production and export levels, especially in the north, where pipeline interdictions and attacks on static infrastructure in the Kirkuk-Baiji Pipeline have limited production and processing capacity. For example, one of two desulphurization plants in Kirkuk was attacked in November 2006, reducing its 500,000 BPD capacity to 50%.109 This plant had been supplementing the output of a larger processing plant in Kirkuk, which has been offline since February 2006 because of an attack.

IMPLEMENTING AND FUNDING SUSTAINMENT ACTIVITIES

Sustaining U.S.-funded projects continues to be a critical challenge for the oil and gas sector. IRMO reported to SIGIR last quarter that the Ministry of Oil was struggling to operate, maintain, and replace aging and deteriorated infrastructure. Iraq's Ministry of Oil, which has a \$3.59 billion budget for FY 2006, saw a decrease in its allocation for maintenance from 2005. In FY 2006, the Ministry of Oil allocated 98.4% of its budget on capital projects, leaving very little for O&M, salaries, services, and pensions. 110 The lack of investment in O&M is compounded by questionable practices, such as fuel reinjection, which continues to take a significant toll on the Kirkuk fields.111 Fuel reinjection—a process in which oil is pumped back into the ground because pipelines, refineries, and/or storage facilities are not able to accept it—damages oil fields.112

GAO reports this quarter that the oil sector's "rebuilding efforts continue to be impeded by the lack of modern technology; qualified staff and expertise at the field, plant, and ministry level; an effective inventory control system for spare parts within the oil sector's 14 operating companies; and difficulties in spending budgets for equipment upgrades and replacements."113

Funding procedures implemented by the Ministry of Finance, Ministry of Planning, and Council of Ministers High Contracting Committee to control procurement corruption have slowed execution of the Ministry's budget. Furthermore, IRMO reports that the capacity



of the Ministry of Oil has decreased over the last year as experienced bureaucrats retire or leave Iraq.114

Iraq's South Oil Company sought to purchase four new tugboats to pull tankers into oil terminals, especially during the winter when the weather on the gulf becomes threatening, but the Ministry of Transportation has held up the transaction, noting price issues and lines of authority for the purchases.115 The State Company for Oil Projects has yet to begin construction of oil storage facilities in the south because the Chinese company it signed an agreement with in 2003 has not supplied the materials. 116

CORRUPTION AND SMUGGLING

For the last four quarters, SIGIR has reported on the debilitating effects of corruption on the Iraqi oil industry. This quarter, corruption remains a challenge. The Ministry of Oil has acknowledged that corruption significantly affects the production and distribution of refined fuels. In its January 2007 report, GAO affirmed the Ministry's acknowledgement, noting that "widespread corruption and smuggling affect the distribution of refined oil products such as gasoline."117

An oil expert with DoS confirmed that oil skimming occurs in Iraq. Skimming means over or under-reporting flows as the fuel is transferred from the pipeline to the mode of transport. The IMF has identified metering as a priority mechanism to limit skimming. 118 Another problem, *smuggling*, occurs when pipelines are tapped or trucks are intercepted. When pipelines are offline, vehicles are the only means of transport for exports and imports.119 This reliance on trucks increases the fear that drivers have ties to the insurgency or are vulnerable to threats and violence.120

BUDGET EXECUTION

During his visit to Iraq last quarter, the Inspector General visited the Ministry of Oil to confer with the Deputy Minister, Chief Budget Officer, and Director of Plans. Those meetings confirmed widely voiced concerns that the Ministry of Oil has had problems executing its capital budget. In January 2007, GAO reported that as of August 2006, "the ministry had spent less than 1% of its \$3.5 billion budget."121 The DoS Bureau of Near Eastern Affairs (NEA)122 noted that the Ministry of Oil has struggled to comply with bureaucratic funding procedures instituted by the Ministry of Finance. Capital projects are affected by the budget process because allocations are made for only one year at a time. For example, a three-year project would be required to submit a budget request every year. If funding is approved in the first year but denied or delayed in later years, the project is delayed. 123 This is a government-wide problem in Iraq and is particulary significant for the Ministry of Oil, the major revenue-generating ministry in the country.

SECTOR SUMMARIES



ENABLING LEGISLATION

Enacting national hydrocarbon legislation remains critical for Iraq to help reduce ethnic, regional, and tribal competition for control of crude oil resources. ¹²⁴ Most international oil companies are awaiting the outcome of the debate before moving ahead with investment deals. According to the Iraq Ministry of Oil, "All indications confirm that the oil sector in Iraq can't stand up on its own without the participation of international companies to develop oil fields and increase export rates." ¹²⁵

The current legislation addresses revenuesharing, creates a new state oil company, and outlines a regulatory role for the Ministry of Oil.¹²⁶ The law is not expected to reach the Council of Representatives until March 2007 at the earliest.¹²⁷

Unlike the consensus to pass the Fuel Import Liberalization Law, the national hydrocarbon legislation continues to experience repeated false starts. 128 On October 22, 2006, the Kurdish Regional Government (KRG) published a final draft of its own hydrocarbon law. Although the KRG was applauded for what was considered an act of transparent government, the language of its legislation places it at odds with Iraq's central government in Baghdad. The main risk to foreign investors is the possibility that the KRG and the central government could pass legislation that is not compatible, thereby generating uncertainty as to which hydrocarbon law will take precedence.



STATUS OF WATER

This review updates the status of U.S. reconstruction projects to increase access to clean water and sewerage services in Iraq and improve water resource management capabilities.

SIGIR makes these observations about activities in the water sector this quarter:

- The water sector has expended all but 30% (\$.65 billion) of its IRRF allocation (\$2.13 billion). Figure 2-27 shows this sector's funding as a share of the total IRRF. Only about 3% of water projects have yet to start, and 84% are complete.129
- The water sector receives the largest portion of FY 2006 CERP commitments (\$151.38 million). Nearly 80% of the obligated FY 2006 CERP funds (\$149.81 million) remains unspent; \$31.52 million was used to complete 323 of the planned 708

projects. An additional 382 projects are ongoing, and 3 projects have not started. Figure 2-28 shows this sector's funding as a share of the total CERP.

SIGIR sees these challenges in the water sector this quarter:

- A major concern for sustainment of U.S.funded projects is the GOI's insufficient O&M budget. In 2006, the GOI allocated 9% of its \$259 million water budget for maintenance activities, according to an IRMO budget expert.¹³⁰
- A remaining challenge is measuring how much potable water the Iraqis will receive and how much sewage will be treated when U.S. projects are completed.131

Figure 2-27
WATER SECTOR AS A SHARE OF IRRF FUNDS \$ Billions % of \$18.44 Billion Source: IRMO, Weekly Status Report (1/2/2007)

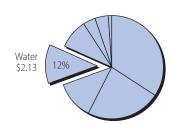


Figure 2-28 WATER SECTOR AS A SHARE OF FY 2006 CERP FUNDS \$ Millions % of \$511.16 Million Source: Office of the Assistant Secretary of the Army Financial Management and Comptroller (9/30/2006)

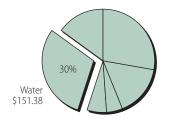




Figure 2-29 **STATUS OF IRRF WATER PROJECTS**Source: IRMO Rollup (12/30/2006);

USAID Activities Report (December 2006)



Sector	Not Started	Ongoing	Completed	Total
Potable Water	22	135	844	1,001
Sewerage	6	7	54	67
Water Conservation			18	18
Pumping Stations and Generators		1	7	8
Other Solid Waste Management			2	2
Umm Qasr/Basrah Water Supply Project		1	1	2
Dam Repair, Rehabilitation & New Construction	n	1		1
Major Irrigation Projects		1		1
Irrigation Project (non-construction)			1	1
Total	28	146	927	1,101

Activities in the Water Sector

As of January 2, 2007, more than 80% of U.S.-funded sewerage projects were finished, and 84% of potable water projects were complete. For the status of projects in the water sector, see Figure 2-29. This quarter, approximately \$120 million was expended in the water sector, a decrease from the previous four quarters.

As of January 2, 2007, 97% of the sector's IRRF funding had been obligated, but only approximately 66% of the total allocation had been expended. Water was the last of the major construction sectors to undertake reconstruction in Iraq. For the status of IRRF funds in this sector, see Figure 2-30.

Key Projects Completed and Underway

All U.S.-funded projects in this sector are scheduled to be complete by October 2008.¹³³ The \$262 million **Nassriya Water Treatment Plant** project is 93% complete, as of December 10, 2006.¹³⁴ The original comple-

tion date of June 2006¹³⁵ was pushed back to October 2006¹³⁶ and then to April 2007 to increase output and provide network connections to five cities.¹³⁷ The Ministry of Electricity is connecting two feeder lines that will provide permanent power to the facility; the plant is currently using generator power. The completed water treatment plant will provide 240,000 cubic meters of water capacity per day, which is sufficient to serve an estimated 555,000 people.¹³⁸

Figure 2-30 **STATUS OF IRRF FUNDS - WATER**\$ Billions

Source: IRMO, Weekly Status Report (1/2/2007):
DOS, Iraq Weekly Status (9/27/2006)







U.S. and Iraqi engineers inspect the broken sweep arm at the Al Kasik Waste Water Treatment Plant.

Additionally, the Nassriya Drainage Pump **Station** was 64% complete, as of December 25, 2006, 139 and is scheduled for completion in June 2007. Cost overruns and schedule delays for this project, however, have pushed its cost to \$147.7 million, nearly double its original obligation of \$82.3 million.140 The overruns and delays are largely the result of the addition of the Industrial Services Water Building, unforeseen site conditions, and increased security costs.141 GRD-PCO and IRMO are considering options for the future of this project.

This quarter, SIGIR inspectors visited the Al Kasik Water Storage Tanks (\$4.9 million) and Al Kasik Waste Water Treatment Plant (\$2.7 million). SIGIR found that although the work on the water storage tanks met applicable standards, the wastewater treatment plant completed in February 2006 has not

been operational since March 2006 because of the failure of the sweep-arm assembly in the clarifier tank. Before the U.S. contractor turned the facility over to the Iraqi operator, the contractor appears to have provided insufficient operational testing and ineffective plant operator training.142 For more information, see section 3 of this Report.

The \$22.9 million project to restore the Sharq Dijla Water Treatment Plant was finished in October 2006. 143 The restored capacity will be sufficient to serve an additional 196,000 cubic meters of water per day, with the potential to serve an additional 392,000 people.144

Last quarter, GRD-PCO introduced a \$116 million Small Potable Water Program, which focuses on contracting directly with Iraqi firms. When completed, these projects are expected to add 419,000 cubic meters



of potable water treatment capacity, potentially serving up to 3.2 million people. As of December 10, 2006, 179 of 323 projects were completed (55%). These projects employ approximately 3,400 Iraqis. The **Potable** Water Rehabilitation Program (\$59 million) is the largest of these projects and has the potential to provide improved water sources to 1.8 million Iraqis. 146

On October 30, 2006, the **Basrah Sewerage Project** was completed. Final electrical connection to the sewer pump stations was completed on December 18, 2006. The project scope included assessing a sewer system, constructing and rehabilitating sewage collection networks, constructing four new pumping stations, upgrading equipment in the wastewater treatment plant, procuring sewer jet trucks, and installing the hospital's main sewer line.¹⁴⁷

Outputs of IRRF-funded Projects

To date, the United States has constructed or rehabilitated 21 potable water treatment facilities and 200 smaller water systems. 148 Addi-

tionally, nine centralized sewage treatment facilities have been rehabilitated. The outputs of these IRRF-funded projects appear in Table 2-8, which shows the current and anticipated capacity provided by completed water projects.

Outcomes of IRRF-funded Projects in the Water Sector

It is difficult to measure how much water Iraqis actually receive as an outcome of U.S.-funded projects or whether the water is potable. 149 To measure the impact of U.S. reconstruction efforts in the water and sanitation sector and on the recommendation of a 2005 GAO audit, IRMO developed a set of metrics and standard methodologies to track potential impacts of U.S. reconstruction efforts for the water sector. SIGIR reports on two primary IRMO water sector metrics:

- maximum additional system capacity
- additional people served at standard level of service, considering actual system conditions¹⁵⁰

CURRENT U.S. WATER PROJECT OUTPUTS AND ANTICIPATED END-STATE

OUTPUTS METRIC	CURRENT STATUS, AS OF 12/31/06	ANTICIPATED END-STATE (APRIL 2007)
Potable Water—Maximum Additional System Capacity	1.67 million cubic meters per day	2.37 million cubic meters per day
Sanitary Sewage—Maximum Additional System Capacity	1.20 million cubic meters per day	1.22 million cubic meters per day

Sources: IRMO, response to SIGIR, January 19, 2007.

TABLE 2-8



CURRENT U.S. WATER PROJECT OUTCOMES AND ANTICIPATED END-STATE

OUTCOME METRIC	CURRENT STATUS, AS OF 12/31/06	Anticipated End-state ^a
Potable Water—additional people potentially served at a standard level of service, considering actual system conditions	5.4 million people	8.4 million people
Sanitary Sewage—additional people potentially served at a standard level of service, considering actual system conditions	5.1 million people	5.3 million people

Source: GRD-PCO, response to SIGIR, January 18, 2007. IRMO reports the anticipated end-state goal for additional people potentially served in sanitary sewage as 5.2 million people. The estimated end-state is based on the estimated date for completing all water projects. All planned GRD-PCO projects will be completed by April 2007 (IRMO, Information Memorandum from Acting IRMO Director to Deputy Chief of Mission, April 19, 2006).

TABLE 2-9

U.S. projects have provided capacity to supply potable water access to an estimated 5.4 million people—an increase from last quarter's 4.2 million and more than half the anticipated end-state of 8.4 million people. For a summary, see Table 2-9.



Pallets of bottled water in Baghdad. Providing access to clean drinking water remains a challenge in Iraq.

Challenges

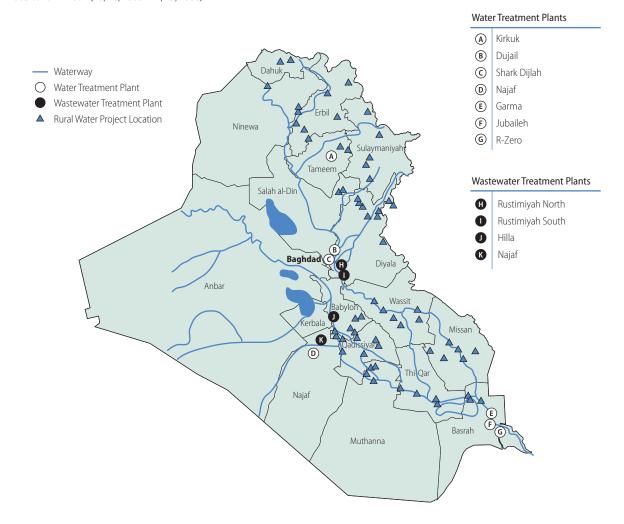
IRMO reports these challenges to sustainability in the water sector:

- the lack of adequate funding for the budgets of the Ministry of Municipalities and Public Works and the Ministry of Water Resources O&M
- incentives to improve performance
- well-established fee-for-service system
- customer-oriented focus for service provi-
- limited capacity to plan and implement major capital projects
- limited capacity to overcome the centralized management structure¹⁵¹

Poor O&M investment by the GOI and insufficient O&M training by contractors before the hand-over of projects continue to affect the sustainability of U.S.-funded projects. In 2006, the GOI allocated only 9% of its 2006 budget to O&M.152 In addition, insufficient O&M training likely hinders the sustainability of U.S.-funded projects, as SIGIR noted about the operations breakdown at the Al Kasik



Figure 2-31
WATER SECTOR SUSTAINMENT PROGRAM (WSSP) PROJECT MAP Source: GRD-WSSP (10/24/2006 - 11/27/2006)



Waste Water Treatment Plant. 153

The Water Sector Sustainment Program (WSSP) responds to the challenge of sustaining U.S.-funded water projects by adding O&M assistance at major water facilities in Iraq and supplying capacity-development functions

to ensure that the Iraqis have the means and ability to carry out sustained operations at an acceptable level of service. 154 This \$116 million program includes \$52 million for O&M facility support and \$21 million for capacity development and training. An additional \$6.3 million



was recently added for plant optimization work conducted by local Iraqi firms in support of the Baghdad Security Plan.

Figure 2-31 shows the locations of WSSP projects by governorate.

The sustainment program intends "to assist the Iraqi people in the proper operation and maintenance of selected water or wastewater facilities." It includes supplying sufficient parts and consumables, as well as providing technical assessments and follow-on specialized repairs or optimization activities.¹⁵⁵ The WSSP builds on completed sustainment projects:

- USAID's Water Sector Institutional Strengthening Program (WSIS) (\$25 million)156 ended in April 2006, providing O&M support for 11 major water and wastewater treatment facilities.157
- GRD-PCO's Management Systems Training Program (\$14.5 million) for the Ministry of Municipalities and Public Works¹⁵⁸ will help build capacity in Baghdad and eight local governorates.159

The ongoing WSSP program is scheduled to be completed in March 2007. The capacity development component of the WSSP includes:

- follow-up training, including mentoring, classroom training, on-the-job training, and workshops160
- use of a scorecard to rate key operational areas at selected facilities, which GRD-PCO reports has been a very effective tool for the oversight and management of the WSSP program¹⁶¹
- daily training, with contractor and Iraqi staff working together, at the 11 facilities previously covered under the WSIS program
- continuing operations support at 40 major facilities and 69 rural water projects (Rural water O&M support activities include providing operators, maintenance technicians, instruction material, security, chemicals, and minor repair support.)

The WSSP is also implementing Phase II of the Capacity Development Program (CDP). This quarter, CDP provided 11 workshop trainings for 174 personnel at the Ministry of Water Resources and the Ministry of Municipalities and Public Works, as well as the Baghdad Amanat (the public works directorate for the city of Baghdad). 162





STATUS OF ECONOMIC AND **SOCIETAL DEVELOPMENT**

This section reports on activities in the following subsectors: democracy, agriculture, education, refugees and human rights, economic and private-sector development, and media.

SIGIR makes these observations about activities in the subsectors:

- IRRF allocations total \$2.21 billion, of which \$1.98 billion had been expended as of January 2, 2007.
- 98% of projects have been completed, 1% are ongoing, and only 1% have yet to start.
- In the democracy subsector, the National Reconciliation and Dialogue Project (NRDP) has held two of four planned conferences on reconciliation, but skepticism remains as to whether substantive reconciliation progress can be made as sectarian violence mounts.
- In the agriculture subsector, USAID's Agriculture Reconstruction and Development Program for Iraq (ARDI) has been closed out. Multi-National Force-Iraq (MNF-I) and Multi-National Corps-Iraq (MNC-I) have also been conducting many projects in agriculture and agribusiness development. A new USAID agriculture program is currently in the Request for Proposal (RFP) stage. The funding delay has forced USAID to let go dozens of Iraqi employees who had

- become adept at USAID project work in this subsector.
- U.S.-funded education programs have closed out. More than 5,100 schools have been rehabilitated or constructed to date, and 6,800 secondary school teachers have been trained in 2006. Security problems have caused many schools to close, and there have been many attacks against Ministry of Education employees, teachers, and professors.
- Two of the five IRRF-funded Migration and Refugee Assistance projects have been completed to date. Many observers are now arguing that there are insufficient resources to assist the growing number of Iraqis forced to leave their homes by escalating violence.
- Economic and private-sector development activities focus on economic governance, meeting the requirements of the IMF Stand-By Arrangement, modernizing the banking sector, and developing the private sector. A renewed focus on rejuvenating the most viable state-owned enterprises and the private businesses they support is part of the President's new Iraq strategy.
- The volatile security situation and politics are hampering the ability of the media to operate effectively and independently.



For the percentages of IRRF allocated and CERP funding committed to this sector, see Figures 2-32 and 2-33.

By the end of this quarter, all IRRF funding for these subsectors had been obligated, and 90% had been expended. As of December 2006, 7,997 projects (98%) had been completed in this sector. 163 For the status of IRRF funding in this sector, see Figure 2-34.

For the status of IRRF projects in this sector, see Figure 2-35.

As of September 30, 2006, almost all of the CERP funding in these sectors (\$144.52 million committed) had been obligated, and 33% (\$48.21 million) of the funding had been expended. To date, 614 CERP-funded projects have been completed, and 498 are ongoing.

Democracy

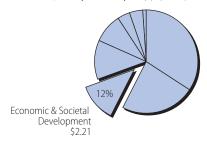
Democracy funding in 2005 focused on the Iraqi elections and national efforts to build civil society at the local level. By 2006, funding had shifted to supporting interagency Provincial Reconstruction Teams (PRTs) and projects to help Iraqi provincial leaders improve their capacity to provide basic services to their citizens.

DEMOCRACY PROJECTS COMPLETED AND UNDERWAY

Most IRRF funds in this sector were used to support the national elections, draft the constitution, and conduct the constitutional referendum in 2005. Various funding streams

ECONOMIC AND SOCIETAL DEVELOPMENT SECTOR AS A SHARE OF IRRF FUNDS

% of \$18.44 Billion Source: IRMO, Weekly Status Report (1/2/2007)

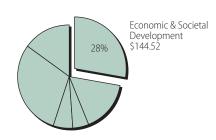


ECONOMIC AND SOCIETAL DEVELOPMENT AS A SECTOR SHARE OF FY 2006 CERP FUNDS

\$ Millions

% of \$511.16 Million

Source: Office of the Assistant Secretary of the Army Financial Management and Comptroller (9/30/2006)



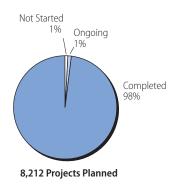


STATUS OF IRRF FUNDS - ECONOMIC AND SOCIETAL DEVELOPMENT \$ Billions

Source: IRMO, Weekly Status Report (1/2/2007); DoS, Iraq Weekly Status (9/27/2006)



STATUS OF IRRF ECONOMIC AND SOCIETAL DEVELOPMENT PROJECTS Source: IRMO Rollup (12/30/2006); USAID Activities Report (December 2006)



Sector	Not Started	Ongoing	Completed	Total
Democracy Building Activities	110	97	5,913	6,120
Schools	1	2	807	810
Civic Program			446	446
Education			444	444
Agriculture	1		373	374
Public Buildings Construction and Repair	1		7	8
Migration and Refugee Assistance		3	2	5
Vocational Training			4	4
Market-Based Reforms			1	1
Total	113	102	7,997	8,212

have also been used to strengthen Iraq's new democracy at the grassroots level by bolstering the legitimacy of the political system, developing institutional capacity, strengthening civil-society organizations, and inculcating a stronger sense of promoting civic involvement among Iraq's citizens.

As of early December 2006, 5,913 of the 6,120 IRRF projects in the democracy subsector had been completed (97%). Additionally, 135 CERP-funded projects had been completed as of September 30, 2006; an additional 108 projects are in progress.

In 2006, the U.S. provided \$315 million from the Economic Support Fund (ESF) for



projects identified by the Provincial Reconstruction Development Committees (PRDCs) in each of the 18 provinces. These projects included the construction of roads, schools, sewers, and telecommunication upgrades. As of December 2006, 33 projects were funded, and \$68 million was expended.

In a national address on January 10, 2007, President Bush expressed his intention to "double the number of Provincial Reconstruction Teams (PRTs)" in Iraq. 164 PRTs work to decentralize U.S.-funded reconstruction efforts by placing combined military-civilian teams at the provincial level to strengthen governance capacity and help Iraqis prioritize development needs. 165 This quarter, DoS reported that the PRTs are focusing more on small-scale projects to help ensure that Iraqis quickly see the benefits of working with the government.166 Currently, there are seven U.S. PRTs and three Coalition PRTs operating in Iraq; the office in Erbil is a Regional Reconstruction Team (RRT) that has not yet been officially opened.167

The ability of PRTs to engage with local governments has been "directly related to support from the coalition force" in each governorate, according to a joint operational assessment of PRTs completed this quarter by MNF-I, MNC-I, and the National Coordination Team (NCT).168 For example, the PRT team leader in Basrah reported in December that "the team itself cannot long be sustained as a body in exile."169 This quarter, ministers from the United Kingdom relocated personnel from the Basrah PRT to Kuwait because of escalating violence.¹⁷⁰ Security conditions have also hampered recruitment for civilian PRT

positions. A further concern is that, as an NCT assessment notes, "systems for documenting measurements in capacity building have not yet been developed and put in place."171 On the other hand, senior USAID officials interviewed this quarter emphasized the positive impact of PRTs, noting that local Iraqi officials in many governorates are beginning to view the PRTs as their key interlocutors for development issues.172

Forty-five million dollars in ESF funds go to the National Capacity Development Program (NCDP), which helps the GOI strengthen its core functions. Its activities include developing of key ministries, the Prime Minister's office, participating inspectors general, and various anticorruption organizations.¹⁷³ The program uses Ministry Advisory Teams to provide public policy and programmatic advice, and work with the ministries to develop and address their respective priorities. It also supports the national public administration centers in their efforts to train ministry employees and develop core competencies.¹⁷⁴ The International Republican Institute (IRI), National Democratic Institute (NDI), and other grantees also receive ESF funds to continue to conduct IRRF-funded democracy activities at the national level.

OUTPUTS OF U.S. DEMOCRACY PROJECTS

U.S.-funded initiatives aimed at improving local governing capacity in Iraq have had mixed results. Since 2003, the Community Action Program (CAP) has operated in Iraq to promote democracy and help mitigate conflict



at the local level. The CAP aims to provide citizens with improved access to quality health care, education, recreation, water, sewerage, and other services by improving infrastructure and providing assistance to war victims. 175 This quarter, the program has established more than 66 community action groups throughout the country, creating more than 7,637 short-term jobs. 176 Additionally, CAP completed 327 community-based projects, valued at \$11 million. The CAP works closely with CAGs and PRTs, most recently emphasizing initiatives to generate income and employment. 177

The Iraq Civil Society Program (ICSP) began as a \$59.1 million contract in 2004 (increased to \$60.9 million, which includes \$8 million in ESF funds) with the goal of fostering participatory democratic governance in Iraq.¹⁷⁸ The ICSP has since supported services to Civil Society Resource Centers (CSRCs), worked to strengthen capacity and technical skills by delivering civic education workshops, advanced women's advocacy programs, and provided training for government officials on anticorruption and human rights.¹⁷⁹ The program is scheduled to terminate on June 30, 2007.

A November 2006 USAID audit on its ICSP contractors' Performance Monitoring Plan (PMP) found that only 17 of 35 intended civilsociety initiatives have been accomplished to date, 8 others failed to meet their objectives, and documentation was not available for the final 10. Program achievements include establishing 4 regional CSRCs, awarding small grants to civil-society organizations, and adapting 83 capacity-building training

modules.¹⁸⁰ The PMP noted that the unfulfilled initiatives related to training staff on organizational assessments, establishing satellite centers, and providing multiple, human rights awareness and issues trainings.181

Last quarter, SIGIR reported on the activities of NDI and IRI in Iraq. Those activities continued this quarter, primarily with ESF funding. This quarter, NDI continued to focus on training and seminars. They have held seminars for political parties and non-governmental organizations (NGOs) on the anticipated provincial council elections and constitutional referendum, consulted with members of the Council of Representatives, debriefed the Multi-party Women's Caucus after the national conference, and conducted voter education. In December, NDI sponsored a delegation of Iraqi civic leaders who traveled to Romania to study civic development and advocacy. 182

IRI continues to support civil society groups, work with political parties to strengthen their structures and broaden their bases of support, and support the development of institutions in the Council of Representatives. This quarter, IRI organized strategic planning sessions for the civil society coalitions, "Civic Coalition for Free Elections," and "Yalla Shabab," a coalition of NGOs. IRI also held training sessions for Research Directorate staff, analyzing legislation and issues. 183

OUTCOMES OF U.S. DEMOCRACY PROGRAMS

The results of U.S. and other democracy programs are difficult to measure because they evolve over time. Nonetheless, it is fair



to suggest that movement toward greater political participation by Iraqis—as manifest in the national elections, active PRDCs, town councils, and the number of media outlets—is partly to the United States and others to train Iraqis in the skills of participating, organizing, prioritizing, and articulating their concerns and desires. Progress on the NRDP has been disappointing. On December 16, 2006, a reconciliation conference took place in Iraq, in which four groups of political leaders were formed to address issues raised by the Prime Minister; formal recommendations from the meeting were to be submitted in writing. 184 A third conference of political leaders, however, has been delayed;185 actionable results from the meetings have yet to develop.

Upcoming milestones for 2007 include the passage and enforcement of constitutional enabling legislation and holding provincial elections throughout the country. ¹⁸⁶ DoD remains skeptical, stating that "concrete actions by the GOI to implement national reconciliation have not been successful." ¹⁸⁷

CHALLENGES

Constitutional Reform. Promised reform of the constitution is needed to strengthen the central government. A July 2006 United States Institute for Peace (USIP) report offered a sober assessment of governance in Iraq, stating that the "central government, on paper and in reality, is possibly the weakest of any federal model in the world." Under the Iraqi constitution, the central government does not have the power to collect regional taxes, disband militias, or regulate the oil sector.

Ministerial Capacity Development

Coalition assessments have indicated repeatedly that Iraqi ministries have limited capacity to provide government services to the people. According to a GAO report, however, "the Iraqi government has taken a growing leadership role in capacity-development efforts in recent months." ¹⁸⁹ The major challenge moving forward, according to the GAO report, is the uncertainty about how the United States will make "the transition from the temporary U.S. entities leading these efforts to those having permanent post-conflict responsibilities." ¹⁹⁰

Security

Violence in Iraq has hampered progress on democracy efforts funded by the Coalition. The effectiveness of the Iraqi governance program remains in doubt as assassination attempts on politicians, professionals, and government officials continue unabated. 191 Additional governance issues include:

- In August 2006, the U.S. Ambassador to Iraq noted that militias must be brought under control for Iraq to progress into a successful state.¹⁹²
- The UN Assistance Mission for Iraq (UNAMI) reports that many of the death squads and rival militias have direct links with, or are supported by, influential political parties belonging to the government; moreover, they are not attempting to conceal their respective affiliations. 193
- The UN has reported that judges and lawyers continue to be intimidated and targeted for attack. Harassment continues



for women and women's groups, especially secular women, who report receiving death threats for not abiding by strict and conservative dress codes. Armed groups in search of fathers and brothers have taken reprisal on mothers, sisters, and wives. 194

Agriculture

USAID has been responsible for most IRRF funding for the agriculture sector through the Agriculture Reconstruction and Development Program for Iraq (ARDI).

AGRICULTURE PROJECTS COMPLETED AND UNDERWAY

In December 2006, the ARDI program officially closed; it had worked to increase the capacity of the private sector in agronomic crop production, increase cultivation of highvalue agricultural cash crops, improve animal health infrastructure and livestock production, and improve the use and management of water on agriculture lands. 195 Projects included establishing feed-lot cooperatives, sheepraising cooperatives, and private veterinary service providers; strengthening honey-producer and agriculture input associations; and building the capacity of local NGOs to implement projects. 196 Additionally, the \$4 million allocated for the Iraq Marshlands Restoration **Program** was fully expended by the end of this quarter.197

As of early December 2006, 373 of the 374 IRRF-funded projects in the agriculture sector had been completed, and the remaining project had yet to begin.

Although the ARDI contract will not be extended, USAID is issuing an RFP for a follow-up project, potentially using ESF funding.198 The contract for this new followon program, known as Inma, is currently in the procurement process and expected to be awarded by USAID in February or March 2007.199 However, ARDI employees may have already been demobilized, and it may prove difficult to bring them back.200

Additionally, the U.S. Department of Agriculture (USDA) awarded \$5.3 million in December 2006 to the Iraq Agriculture Extension Revitalization Project (IAER) to strengthen agriculture extension and training initiatives at Iraqi universities. As part of this project, a team of five U.S. universities will partner with universities across Iraq. The U.S. universities have specialized programs in aridland agriculture, strong extension programs, experience in Middle East agro-ecologies similar to the various regions of Iraq, and 13 professors of Iraqi descent on their faculties.²⁰¹

IAER has a number of objectives: establish links between Ministry of Agriculture extension agencies and Iraqi agricultural colleges,²⁰² strengthen university capacity development, and provide training and support to Iraqis. The project will also provide specialized training and work with the private sector; it is scheduled to operate until September 2008.²⁰³

An additional \$2.5 million was designated to USDA staff who are currently supporting this project, and the Ministry of Higher Education and the Ministry of Science and Technology will also be involved.204



Using CERP funding, MNF-I and MNC-I are working to advance certain ARDI initiatives and project ideas, including:

- repairing and reconstructing irrigation infrastructure
- establishing farmer cooperatives and associations
- distributing cereal grain-seed cleaners throughout Iraq
- establishing honey-processing centers
- establishing vocation training centers with modules related to farm machinery repair
- distributing farm inputs (seed, fertilizer, etc.)205

As of September 30, 2006, 30 CERP-funded agriculture projects had been completed, and an additional 45 were ongoing.

Finally, the GOI is in the process of developing the Investment and Action Plan for Growth (IAPG) under the International Compact with Iraq (the Compact). The IAPG is a detailed plan that quantifies Iraq's financial and technical needs and sources. Agriculture is identified as one of the first sectors on which the IAPG will focus. The Compact includes two actions in this subsector—liberalizing the agricultural market and increasing access to agriculture credit through financial market reforms.206

OUTPUTS OF IRRF-FUNDED AGRICULTURE PROJECTS

The ARDI program worked directly with the Ministry of Agriculture, presenting an "Iraqi face" that helped keep security costs relatively low.²⁰⁷ The program employed more than 400 people; fewer than 30 were non-Iraqis.²⁰⁸ For final output metrics of the ARDI program, see Table 2-10.

The next USAID agriculture project will focus on agribusiness development, but some funding will remain for technical assistance to agricultural production. The Iraqi private sector is expected to provide farm machinery to assist in agricultural production, and credit programs are being set up to assist where necessary.²⁰⁹ USAID reported that there is also a need for continuing ARDI-type work along with agribusiness development.²¹⁰

OUTCOMES OF IRRF-FUNDED AGRICULTURE PROJECTS

Project outcomes in the agriculture sector depend mainly on activities that offer longterm returns on investment. USAID reported that the ARDI programs provided a potential \$400 million in value added to the Iraq economy.²¹¹ For example, production increased by an average of 70% in wheat, maize, rice, sorghum, and tomatoes.²¹² Also, 300,000 farm families increased productivity by more than 30% because of improved technology, infrastructure, and access to profitable markets provided by the ARDI programs.²¹³ Finally,



ARDI OUTPUTS

	From 2005 to 2006, ARDI conducted wheat seed multiplication programs in two northern governorates, which provided 3,000 metric tons of higher quality, "certified +1" wheat seed to wheat producers.
Crop and Livestock Management	ARDI helped establish with the State Board for Date Palm Development 21 date palm mother orchards in 13 governorates. From 2004 to 2006, ARDI provided 80,000 date offshoot plants to the mother orchards, which will produce 240,000 new offshoots per year. ^a
	7,406 farmers cleaned their saved wheat seed between September 2005 and January 2006, producing more than 35,000 metric tons of cleaned wheat seed. ^a
	40 private veterinary service providers were established, 10 each in Ninewa, Kirkuk, Dahuk, and Salah al-Din. The providers offer services to rural areas not served by government clinics. ^b
	68 veterinary clinics were rehabilitated, serving more than 5.7 million animals and 135,000 breeders.
Land Irrigation	ARDI rehabilitated irrigation systems, impacting 282,038 hectares. ^c
	ARDI rehabilitated more than 1,100 km of irrigation infrastructure, which brought water to 283,000 hectares of land and benefited more than 85,000 farm families. ^a
	ARDI trained more than 215 mechanics, mostly in rural areas, as part of the tractor-repair program to improve infrastructure for repair and maintenance services for agricultural machinery.
Training and Capacity Development	A wholesale price information system was established in all 18 governorates for dissemination by mass media (radio, SMS, e-mail) to farmers and traders of 60 fruits, dry goods, animal products, and agricultural inputs. ^a
	ARDI also provided business management, association-building, and facilitation training to 19 NGOs active in agriculture development, 293 agricultural cooperative members in 15 newly-formed cooperative associations, 4,300 beekeepers and honey producers, a national association of 233 independent pesticide dealers, and 526 extension specialists. ^a
Mechanical Repairs	4,835 tractors were rehabilitated out of a goal of 5,000.b

^a IRMO, response to SIGIR, January 16, 2007.

TABLE 2-10

approximately 3,000 agribusinesses have generated at least 50% gains in income, including honey producers, mechanics, and tractor owners.214

ARDI projects led to an increase of wheat production of 56% in areas cultivated by these initiatives, including replacing old seed varieties, introducing more productive growing techniques, cleaning wheat seeds, implementing pest-control techniques, and introducing salt-tolerant seed varieties.²¹⁵ This should help the Iraqis reduce their dependence on imported wheat.

To comply with the Stand-By Arrangement with the IMF, Iraq has asked the Coalition and other donors for advice under the Economic Governance program on how to phase out the Public Distribution System (PDS), which subsidizes food items by an estimated \$3 billion annually. The Iraqis are expected to ramp down the PDS over the next 3-5 years.216

CHALLENGES

SIGIR sees two major challenges in the agriculture sector: inadequate security and the need to develop market-friendly laws and policies.

^b DoS, Section 2207 Report, October 2006, I-100.

^cUSAID, Agriculture Reconstruction and Development Program for Iraq—End of Project Presentation, December 18, 2006, p. 26.



Security

Last quarter, the IRMO agriculture advisor noted that the greatest challenge for this sector is identifying how to work efficiently and effectively in the difficult security climate.²¹⁷ Although security accounted for only 6% of ARDI's total budget, security concerns caused project delays and cancellations, especially in ARDI's early days.²¹⁸ ARDI management moved its headquarters to Erbil in December 2004 because of the deteriorating security situation in and around Baghdad.²¹⁹ Many ARDI projects could not be initiated in certain areas of Iraq because of security risks, leaving out many potential recipients. Planned activities on specific projects also could not be implemented because of the danger and threats to the recipients.²²⁰

Develop Market-oriented Laws and Policies

Transitioning the agriculture sector to a market-oriented system will require substantial training and capacity building, investment capital, and mercantile infrastructure development. It will also require ending 15 years of universal food subsidies under the PDS while preserving a safety net for vulnerable groups. This challenge is also being addressed through programs to build ministerial capacity and support agricultural business development, as well as a USDA program to improve the Iraqi extension service.221

Education

IRRF funding in the education sector was almost completely expended last quarter, with the exception of a few activities related

to school furniture and equipment, as well as three other projects to be finished by August 2007.222

Also, 316 CERP-funded projects in the education subsector had been completed, as of September 30, 2006; 236 projects are ongoing. Four projects have not yet begun.

The outputs in the education sector are reviewed in Table 2-11.

The United States has undertaken 6,639 projects, totaling \$1.15 billion, in the education sector.²²³ The October 2006 DoS Section 2207 Report stated that U.S.-funded projects have refurbished or constructed 5,168 schools to date.224 USAID reported that 33,000 secondary school teachers and administrators 15,513 of them women, were trained in 2004, and 6,800 secondary school teachers were trained in 2006. In addition, 84 primary and secondary schools were established as centers of excellence, providing specialized training to teachers.225

USAID IRRF funds supported the printing and distribution of 8.7 million math and science textbooks and delivered hundreds of thousands of desks, chairs, chalkboards, and more than 3 million school kits. USAID helped more than 13,000 out-of-school children complete an accelerated learning program. The Ministry and Directorates of Education also benefited from installation of U.S.-supplied computers and internet access.²²⁶

Despite the progress made by U.S.-funded projects, the lack of security has reduced the potential benefits of these activities. Many schools and universities have been forced to close, and teachers and professors have become



SCHOOLS REPAIRED BY U.S. RECONSTRUCTION PROJECTS

TOTAL SCHOOLS	Schools Needing	Projects	Projects in	PROJECTS NOT
(2003)	Repair (2003)	Completed	Progress	YET STARTED
14,121	11,000	741–USAID IRRF 1 2,358–USAID IRRF 2 807–GRD-PCO IRRF 1,365 – MNF-I	N/A–USAID IRRF 1 77 USAID IRRF 2 2–GRD-PCO IRRF 2 N/A–MNF-I	N/A–USAID IRRF 1 N/A–USAID IRRF 2 1–GRD-PCO IRRF 2 N/A–MNF-I

Sources: DoS, Section 2207 Report, October 2006, p. 17 (Total Schools and Schools Needing Repair, MNF-I data); GRD-PCO, response to SIGIR, January 4, 2007 (PCO projects); all other metrics unchanged since last quarter.

TABLE 2-11

targets of violent attacks. In 2006 alone, the Ministry of Education reported that more than 300 of its teachers and employees were killed, and an additional 1,158 were wounded.227

From 2003 to August 2006, the Ministry of Higher Education reported that 154 professors had been assassinated, and in the three months between August and October 2006, 15 more were killed.²²⁸ It has been estimated, that 90% of the schools in the Diyala governorate are closed because of adverse security conditions, threats, and attacks. Almost no schools in the city of Ramadi in Anbar have opened because of insurgent threats.229

Although maintaining security around these educational institutions is the responsibility of the Iraqi government, it is difficult to determine how well these U.S.-refurbished facilities are being protected and to what degree they are being used.

Refugees and Human Rights

The escalating violence in Iraq during 2006 has caused an estimated 500,000 Iraqis to leave their homes. Approximately, 2,000-3,000 Iraqis leave for neighboring countries each day.²³⁰

The growing number of Iraqi refugees and internally displaced Iraqis has outpaced the resources available to support them, and violence in Iraq has hindered humanitarian efforts to assist Iraq's internally displaced population.

REFUGEES

During FY 2004, \$105 million in IRRF funds was allocated to assistance for conflict victims, including refugees and internally displaced persons (IDPs). In FY 2005, an additional \$54 million was allocated; a further \$27 million in FY 2006 brings the total allocation to \$186 million.²³¹ As of September 30, 2006, all allocations had been obligated, and \$134 million had been expended. IRRF funds have been used to support the capacity-building efforts of various Iraqi organizations, including the Ministry of Displacement and Migration and international groups, such as the International Organization for Migration (IOM), the UN High Commissioner for Refugees (UNHCR), and the International Committee of the Red Cross (ICRC).232



Progress in U.S.-funded projects in this sector included completing permanent water sources, continuing mobile health unit activities, and implementing water and sanitation activities, as well as training for the newly formed Iraq NGO, "Relief Iraq." CERP is funding 146 additional humanitarian or reconstruction projects, which include construction of homeless shelters, providing orphanage supplies and food bags, and conducting shoe drops.²³³

RESOLUTION OF REAL PROPERTY DISPUTES

IRRF funds (\$10 million) have been committed and expended to support the Commission for Resolution of Real Property Disputes, formerly the Property Claims Commission. IOM implementation of the out-of-country claims program continues to be delayed pending additional funding that the UNHCR has committed. As of August 31, 2006, Iraqis had filed 124,092 property claims, and 25,893 had been adjudicated. UNHCR reports that only 401 Iraqis returned to Iraq in 2006, compared to 55,267 in 2005 and 191,645 in 2004. Last quarter, the UNHCR shifted its focus from aiding returning Iraqis to helping displaced citizens who continue to flee because of increased sectarian violence.234

HUMAN RIGHTS

Fifteen million dollars in IRRF funds were allocated to promote human rights in Iraq. All funds have been obligated, and \$12 million has been expended. USAID Human Rights projects, funded by \$1.4 million of the IRRF, had been closed out by the end of October 2006.²³⁵

In FY 2007, the DoS Bureau for International Narcotics and Law Enforcement Affairs (INL) requested \$14 million to fund additional human rights programs to:

- Build internal monitoring, reporting, and enforcement systems in the Ministries of Interior and Defense.
- Support development of a robust and independent Human Rights Commission.
- Develop the capacity of Iraqi NGOs to monitor and report on human rights violations.
- Support the Human Rights Ministry.
- Train Iraqi journalists.²³⁶

CHALLENGES

Continued Human Rights Violations

The human rights situation continues to deteriorate in Iraq. UNAMI reports that attacks on Iraqi civilians and professionals have increased over the past few months:

- Attacks on professionals, such as teachers and religious figures, have increased since October 2006.
- Freedom of the press is currently a contentious topic in Iraq, as journalists and media workers remain targets for attack and assassination.
- Women in the central and southern governorates are increasingly restricted from accessing health and education services because of the volatile security situation.
 Furthermore, women continue to be the



- victims of honor crimes, especially in the northern governorates.
- It has also been reported that minorities living in Kirkuk are prevented from participating in political, economic, and social developments in the city.²³⁷

UNAMI also reports that the total number of civilians violently killed in 2006 is 34,452— 94 civilians each day. The number of civilians killed throughout the country was 3,462 in November and 2,914 in December, although December's figure does not include all governorates. The numbers of civilians killed in Baghdad alone during these same months were 2,230 and 2,501, respectively. On average, 3,338 Iraqis were killed each month between July 1, 2006, and December 31, 2006.238

Increased Refugees and IDPs and the Resolution of Real Property Rights

Although there are no exact figures for Iraqis displaced internally and abroad, the UNHCR reported in January 2007 that approximately 500,000 Iraqis had been internally displaced since the bombing of the Al-Askari Shrine in Samarra in February 2006.²³⁹ Additionally, it is estimated that approximately 50,000 Iraqis flee their homes each month. Many of these internally and externally displaced people are urban professionals considered crucial to Iraq's stability and development.²⁴⁰ Figure 2-36 shows how the Iraqi population has been displaced.

During the first half of 2006, more than 8,100 Iraqis applied for asylum in Europe, a 48% increase from the first half of 2005. The number of Iraqis seeking asylum in the United States and Canada increased 32% during the same period.²⁴¹ Some observers have advocated raising the quota for Iraqi refugees allowed to resettle in the United States.

The sheer number of displaced Iraqis challenges the resources and services of host communities and host countries, and Iraq's neighbors are becoming overwhelmed by the growing number of Iraqi refugees in their countries. Syria has begun imposing new restrictions, such as limiting access to health care and schools. Jordan has closed its borders to young Iraqi men, and Lebanon has closed its borders to all Iraqi refugees.²⁴² The number of IDPs moving to the northern regions of Iraq is growing.243

Security

Security concerns across Iraq limit access of Iraqi ministries, humanitarian agencies, and NGOs to many vulnerable displaced groups. Both the UN and local aid groups have reportedly received threats for helping displaced families of differing religious affiliations.²⁴⁴ On November 9, 2006, the head of the Iraqi Red Crescent Society Administration was kidnapped.²⁴⁵ On December 18, 2006, the Iraqi Red Crescent (IRC) closed all of its Baghdad branches until further notice after the kidnapping of 30 IRC employees.246

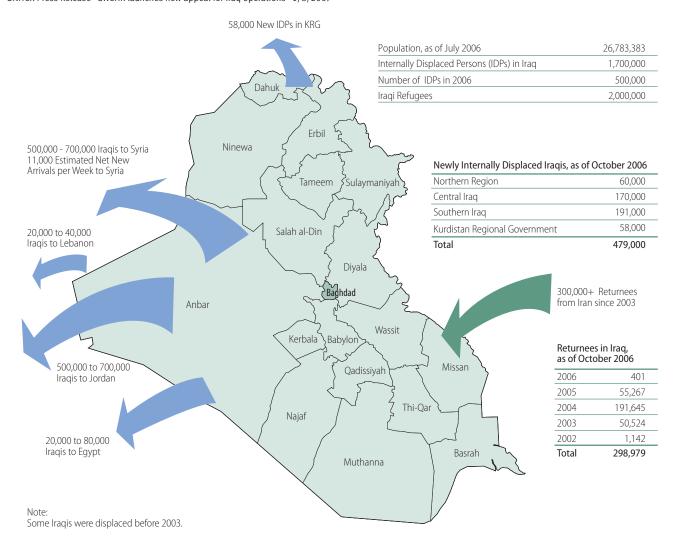
Funding

UNHCR operated in Iraq in FY 2006 with a budget of \$29 million. On January 8, 2007, UNHCR launched a new appeal for \$60 million for Iraqi operations over the next 12 months to deal with an estimated 2.3 million



Figure 2-36
MOVEMENT OF INTERNALLY DISPLACED IRAQIS AND IRAQI REFUGEES

Source: "UNHCR Update on the Iraq Situation," UNHCR, November 2006; UNHCR "Iraq Situation Map; Situation as of October 2006"; CIA 2006 World Factbook: Iraq.www.cia.gov/cia/publications/factbook/geos/iz.html; UNHCR Press Release "UNCHR launches new appeal for Iraq operations" 1/8/2007





internally displaced persons. These funds will cover protection and assistance programs for Iraqi refugees in Syria, Jordan, Lebanon, Egypt, and Turkey, as well as non-Iraqi refugees and IDPs within Iraqi.²⁴⁷ The increase in refugees also increases expenditures to pay for refugee status determination. The United States and Iraq's neighbors rely on the UNHCR to identify the most vulnerable Iraqi refugees. The DoS Bureau for Population, Refugees, and Migration has acknowledged that a lack of resources has hindered the UNHCR from doing settlement referrals on behalf of the United States.²⁴⁸

Economic and Private-sector **Development**

This section presents the key U.S. economic and private-sector development projects, as well as a general overview of the outputs of these projects.

PROJECTS COMPLETED AND UNDERWAY

Private-sector development programs have been allocated \$393 million of the IRRF. Approximately \$100 million was allocated to the ARDI program, and the remainder went to programs in institutional reforms, business skills and vocational trainings, and marketbased initiatives. All funding in this sector has been obligated.249

USAID manages the vast majority of the funds in economic development. Its privatesector development funds (other than agriculture) are concentrated in two major contracts—one for economic governance and the other for private-sector development. USAID

also manages the microfinance program, under Izdihar, started by the CPA.²⁵⁰

Approximately \$30 million of IRRF funding was provided to the Overseas Private Investment Corporation in 2004 for expanding the Iraq Middle Market Development Fund (IMMDF),251 a loan program that provides Iraqi companies with credit facilities of \$35,000 to \$5 million.²⁵² The program was recently provided an additional fund of \$9.1 million for smaller loans (\$35,000 to \$500,000), and 30% of this fund will be for agribusiness loans. As of the first week of January 2007, IMMDF has approved six loans, which have totaled approximately \$14.8 million. In addition, 11 loans, or \$32.6 million, have been disbursed.²⁵³ IMMDF also continues to support production in industries such as water, woodworking, milling, and used vehicles.254

As of September 30, 2006, 43 CERP-funded private-sector development projects had been completed, and 54 were ongoing.

ECONOMIC GOVERNANCE

The USAID Economic Governance II Project (EG) aims to help the GOI structure and implement "an operational legal, fiscal, regulatory and institutional framework, within which reform and policy can be formulated to foster a transparent and investment-friendly, marketbased economy."255 This quarter, USAID reported that \$113.5 million was distributed to the EG II project.256

The project works to support the reforms required to meet 28 of the 58 IMF targets²⁵⁷ through training, assistance in drafting of



legislation, and advocacy with international donors and organizations.²⁵⁸ The training plan and workflows were completed for the **General Commission for Tax** to support the automated tax system. The plan is to install the system by the end of the year.²⁵⁹ On November 21-22, 2006, USAID and the Ministry of Finance cosponsored a conference, "Tax Reform–Mainstay for Building the Iraqi Economy," which brought together a group of experts to discuss tax policy.²⁶⁰

Another fiscal reform initiative is to develop the Financial Management Information System (FMIS), a new accounting and reporting system designed for all ministries to improve their respective budget preparation and cash-management processes while discouraging corruption. The core FMIS and additional modules are scheduled to be installed in all 182 budget agencies by September 2007; nevertheless, complete replacement of the legacy manual system depends on access of all agencies and a directive from the Minister of Finance.261 This quarter, DoS reported that the Kurdish Regional Government was set to enter its expenditure data into the new system by year-end.262

The **Social Safety Net (SSN) automation Pilot Unit** in the Ministry of Labor and Social Affairs was first rolled out in December 2005. Development and testing activities of the software application for the SSN are also underway, as well as training ministry employees in its use.²⁶³

Treasury has helped establish a joint CBI/Ministry of Finance **Bank Restructuring Committee**, which should evolve into an inde-

pendent commission. Draft memorandums of understanding (MOUs) and an action plan were completed after the Ministry of Finance, CBI, and the two largest state-owned and commercial banks reached a unified position. These MOUs and action plan will be submitted to the Council of Ministers for approval by the end of 2006.²⁶⁴

A committee was established to address the issue of official debts; the committee will inventory, supervise, and resolve all official debts of the state in the bank records. Finally, the CBI worked with the headquarters of five other private banks last quarter to adopt two new components of the Iraqi Payment System (IPS).²⁶⁵ These activities should help strengthen linkages in the banking sector and improve oversight of the banks.

PRIVATE-SECTOR DEVELOPMENT PROGRAM

The private-sector development program, **Izdihar**, is designed to help the country achieve economic growth and higher employment through six areas:²⁶⁶

- privatization
- trade and market access
- investment promotion
- · capital markets
- business skills
- · micro, small, and medium-size enterprises

USAID reported that it has distributed approximately \$96.1 million of IRRF to Izdihar, and USAID is planning a new microfinance project that will begin in late 2007.²⁶⁷



Izdihar continues to support the GOI on joining the World Trade Organization (WTO), assisting the government to draft the required documentation, responding to questions posed by WTO members, conducting conformity assessments, and appropriately training Iraqi government.268

Izdihar has also helped create the Iraq Company for Bank Guarantees (ICBG), which offers loan guarantees to private banks. The ICBG allows Iraq's microfinance industry to receive loans from private banks rather than just international donors.²⁶⁹ ICBG began its operations on November 1, 2006, and Izdihar plans to develop operational policies, procedures, and manuals; train staff; and establish headquarters to continue assisting ICBG through the end of 2006.270

Also, Izdihar's Sustainable Microfinance program includes grants to microfinance institutions (MFI), training for MFI staff, and technical assistance. USAID recently awarded \$9.9 million in grants to establish or continue the development of sustainable Iraqi MFI.²⁷¹ Last quarter, one new microfinance institution started operating and was awarded a \$250,000 grant to be used for loan capital.²⁷² From November 14-16, 2006, USAID organized the first Iraq Microfinance Summit in Erbil, with more than 100 participants in attendance.²⁷³ Izdihar also plans to train Iraqi MFI staff in the near future.274

Other activities under private-sector development last quarter include providing materials to the Iraqi Investment Promotion Agency and conducting strategic planning meetings. Izdihar also continued building capacity for

the Iraq Trade Information Center, which was established to encourage international investors through training and database/website development. USAID also supported the Iraqi Securities Commission through rule and regulation implementation and document drafting. The staff of the Iraqi Stock Exchange also received training for information technology, public relations, and regulations through seminars.275

DoD's Office of Business Transformation is exploring ways to help Iraq reinvigorate some of the most promising state-owned enterprises, using better market analysis that helps identify potential demand for the products of the enterprises in Iraq and beyond. It is anticipated that this activity will stimulate employment and private businesses that traditionally spring up around these state owned-factories.

OUTPUTS OF U.S. PROJECTS IN ECONOMIC DEVELOPMENT

EG project activities have yielded notable results in tax reforms: a Tax Policy Unit has been established within the Ministry of Finance to create a taxation strategy as mandated by the SBA. With assistance from USAID, the Ministry of Finance drafted a plan to overhaul Iraq's outdated tax system. The final plan is to be approved by the Council of Ministers and adopted by the GOI by the end of December, and implementation of this plan will meet a significant SBA requirement. Also, as of December 2006, all ministries and regional treasuries were using FMIS in parallel with the legacy manual system.²⁷⁶



As of September 2006, USAID was engaged in microfinance lending in 13 governorates, and its loan portfolios comprised 16,673 loans totaling more than \$17.8 million. Currently, more than 630 MFI staff have been trained.²⁷⁷ Last quarter, the first two indigenous microfinance institutions established with Izdihar's support had extended 40 new loans for \$100,000.278 In addition to these two MFIs, located in Kirkuk and Baghdad, the MFI in Fallujah was scheduled to open in January 2007.²⁷⁹

IRAQ'S ECONOMY REMAINS FRAGILE

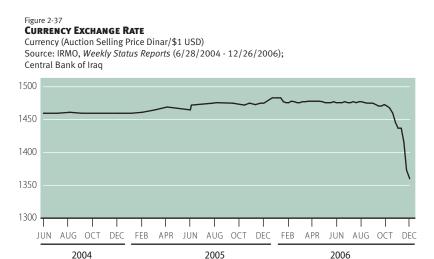
Despite some positive results from U.S.-funded projects, Iraq's overall economic environment is still fragile. Inflation is a serious concern as the volatile security environment, shortage of goods, and supply disruptions in the non-oil economy push prices upward.280

The 2006 SBA inflation goal of 15% is not

likely to be met: Iraq's Central Office for Statistics reported a surge of 7.6% in the Consumer Price Index for December 2006 alone.²⁸¹ The Economic Intelligence Unit estimated that inflation averaged 52% in 2006, significantly higher than last year at 32%.²⁸²

To cope with this increasing inflationary pressure, the CBI began to implement policies in September 2006 designed to appreciate the dinar, as suggested by the IMF.283 Iraq is an import-reliant country; therefore, a more valuable currency may help alleviate some pressure. As of December 26, 2006, the exchange rate was 1,360 Iraqi dinars to the dollar.²⁸⁴ The Central Bank has also raised its interest rate from 16% to 20%, as of December 24, 2006, to encourage holding dinar-based assets and lower expectations of inflation.²⁸⁵ See Figure 2-37 for historical and current information on the currency exchange rate.

Per capita GDP is rising in Iraq, from \$949





per person in 2004 to an estimated \$1,189 in 2005 and \$1,635 in 2006.286 However, when inflation is taken into account, real GDP growth is estimated to be only 4% in 2006, well below the SBA's 10.4% benchmark and the medians of other Middle Eastern and oil-producing countries.287

Unemployment remains very high in Iraq. As of July 2006, the Central Office for Statistics estimated that unemployment was at 18% and that underemployment was at 30.4%. However, officials believe that these numbers have been underestimated.288

CHALLENGES

Although there has been some economic progress in Iraq, economic development cannot reach its full potential unless Iraq first resolves its other challenges:

- security
- corruption
- lack of government capacity
- deteriorated infrastructure

Media

The Support for Independent Media in Iraq (SIMI) program is the media component of USAID's \$42 million Civil Society and Independent Media Support Program. SIMI is implemented by the International Research and Exchanges Board (IREX).²⁸⁹ IRRF funding for Civil Society and Independent Media Programs ended on September 30, 2006, but alternate funding remains for continuing similar

activities going forward.²⁹⁰ The objectives of the Independent Media Programs are to develop democratic media laws, promote media excellence and professionalism, support media as a commercial enterprise, and strengthen media associations and NGOs.291

The Iraq Civil Society Program has conducted media workshops to brief Iraqi journalists on the media and federalism to improve participants' understanding of federal systems and the concept of public broadcasting and the importance of citizen control over program content. This program also supports efforts to promote the draft Iraqi Media Corporation Law. USAID is in the process of redesigning the scope of work for the follow-on project.²⁹²

PROJECTS COMPLETED AND UNDERWAY

The SIMI program has helped establish and build capacity for the National Iraqi News Agency and Iraqis for Public Broadcasting. USAID reports that SIMI has increased the knowledge and skills of more than 1,000 journalists and media professionals and has established an Iraqi media watchdog group.²⁹³

CHALLENGES

Journalists and news publications in Iraq continue to be the target of threats and attacks. Since March 2003, at least 132 journalists and media workers have been killed in Iraq.²⁹⁴ The Committee to Protect Journalists reported in December that 32 journalists were killed



in Iraq during 2006—the highest one-year death toll on record for journalists in a single country.²⁹⁵ Media organizations have also been targeted: Al-Shaabiya satellite television and Al Iraqiya satellite television were attacked in October 2006.296

Iraqi journalists and other media workers in the southern and central regions were banned from attending parliament sessions, or threatened. The GOI may close stations alleged to incite hate and violence.²⁹⁷



STATUS OF SECURITY AND JUSTICE

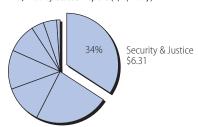
The volatile security situation in Iraq continues to pose a significant challenge to the overall reconstruction effort. DoD warns that conditions in Iraq could lead to a full-scale civil war, particularly in and around Baghdad.²⁹⁸ Persistent attacks on U.S.-funded infrastructure projects and sustainment challenges could jeopardize the completion of projects by their planned end dates in the second half of 2008.²⁹⁹ The precarious security situation has not only hindered reconstruction progress, but it has also hampered an effective, consistent security strategy. GAO reports that expectations and benchmarks have changed numerous times since fall 2003 because the GOI and

security forces could not assume security responsibilities.300

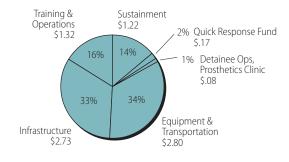
IRRF funding intended to support the progress of security and justice personnel and facilities in Iraq has been almost fully obligated and expended, but more funding has been added through the ISFF. Figure 2-38 shows the security and justice sector301 funding as a portion of the IRRF. Figure 2-39 shows the sector funding as a portion of the ISFF.

Additionally, \$277 million from the Economic Support Fund (ESF) has been allocated to protect the infrastructure of the oil, water, and electricity industries.302

Figure 2-38 SECURITY AND JUSTICE SECTOR AS A SHARE OF IRRF FUNDS \$ Billions % of \$18.44 Billion Source: IRMO, Weekly Status Report (1/2/2007)



SECTOR SHARES OF ISFF FUNDS \$ Billions % of \$8.32 Billion Source: DoD Secretary of the Army Update (12/31/2006)



Note: 1. Totals are produced by combining financial details, from ISFF 2005 and ISFF 2006 funds.



SIGIR makes these observations on IRRFand ISFF-funded activities in the sector:

- More U.S. funds have been committed to security and justice than any other reconstruction sector—almost \$15 billion from the IRRF and ISFF.
- As of January 2, 2007, almost 90% of the \$6.31 billion IRRF allocation in this sector had been expended.
- As of December 30, 2006, more than 54% of the cumulative \$8.32 billion ISFF allocation had been expended.
- An additional \$1.7 billion was appropriated for ISFF in the FY 2007 Defense Appropriations Bill. These funds will remain available until September 30, 2008.
- As of January 8, 2007, 323,000 Iraqi Security Forces (ISF), including military and police personnel, have reportedly been trained, equipped, and fielded.³⁰³ DoD notes that the actual numbers of active soldiers and police on duty are significantly lower because of scheduled leave, absence without leave, and attrition.304
- As of December 2006, 91% of IRRF-funded projects had been completed in the security and justice sector.

SIGIR also sees significant challenges in this sector:

Although the reported number of trained and equipped ISF has almost reached the

- target of 325,000 troops and police, the security situation in parts of Iraq continues to deteriorate. Insurgent attacks and continued infiltration of the ISF and Iraqi Police by militia members also contributes to the escalating violence in some parts of the country.
- Critical infrastructure remains a target for insurgent attacks, and the effectiveness of the Strategic Infrastructure Battalions (SIBs) remains questionable.
- Transition of full security responsibilities to the Iraqis faces significant challenges, including militia infiltration of the ISF, slow growth in the capacity of the Ministries of Defense and Interior to support the soldiers and police, and the need for additional training for the ISF. In addition, the Iraqi Army still struggles to plan and execute logistics and sustainment requirements.

Activities in the Security and Justice Sector

On January 10, 2007, President Bush announced his intention to increase the number of U.S. forces in Iraq to help stabilize the security situation, particularly in Baghdad and Anbar. He noted, however, that this surge would be in support of the ISF and the GOI's ability to reach specific benchmarks.³⁰⁵

In the meantime, IRRF and ISFF funds continue to be used to further develop the



operational capacity of the ISF and the Ministries of Interior and Defense, while also aiming to facilitate the rule of law in Iraq.

Programs and Activities Completed and Underway

IRRF projects focus on constructing and refurbishing facilities. By the end of the

quarter, approximately 90% of IRRF funds for this sector had been expended. For the status of IRRF funding, see Figure 2-40. ISFF funds, however, are used mostly to train, equip, and field members of the ISF. As of December 31, 2006, 54% of ISFF funding had been expended. For the status of ISFF funding, see Figure 2-41.

STATUS OF IRRF FUNDS - SECURITY AND JUSTICE Source: IRMO, Weekly Status Report (1/2/2007); DoS, Iraq Weekly Status (9/27/2006)



STATUS OF ISFF FUNDS - SECURITY AND JUSTICE Source: DoD Secretary of the Army Update (12/31/2006)



Totals are produced by combining financial detail from ISFF 2005 and ISFF 2006 funds.



For a detailed list of projects funded by the IRFF and ISFF, see Figures 2-42 and 2-43.

Almost all of the committed \$30.31 million in CERP funding had been obligated, as of September 30, 2006. Additionally, \$17.29 million in CERP funding-57% of the committed amount—had been expended. Figure 2-44 shows sector funds as a percentage of the CERP.

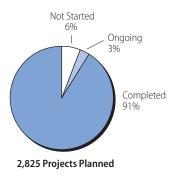
SIGIR has performed two audits on how Multi-National Force-Iraq (MNF-I) has used CERP funds (Audit 05-014 in October 2005 and Audit 05-025 in January 2006) and one audit on MNF-I's use of the Iraqi Interim Government Fund for CERP-like programs (Audit

06-031 in October 2006). Generally, SIGIR found that MNF-I had established reasonable processes to manage funds and projects. SIGIR also noted some data quality and reporting errors, as well as improvements in the management of funds.

MILITARY/POLICE FORCE DEVELOPMENT **AND SUPPORT**

Work in this sector has focused on building military and police forces, mostly with funding from the ISFF; the effort has resulted in 323,000 trained and equipped military and police personnel, as of January 8, 2007.306 The

Figure 2-42 STATUS OF IRRF SECURITY AND JUSTICE PROJECTS Source: IRMO Rollup (12/30/2006); USAID Activities Report (December 2006)



Sector	Not Started	Ongoing	Completed	Total
Marla Ruzicka Iraq War Victims Fund	151	18	978	1,147
Commanders Humanitarian Relief & Reconstruction		1	602	603
Facilities Repair	3	11	429	443
Border Enforcement	2	8	265	275
Establish New Iraqi Army	3	14	77	94
Iraqi Civil Defense Corps	4	14	69	87
Police Training & Assistance	11	3	59	73
Judicial Security & Facilities		9	28	37
Investigations of Crimes Against Humanity		1	34	35
Miscellaneous		3	7	10
Reconstruction of Detention Facilities	1	3	1	5
Witness Protection Program		4	1	5
National Security Communications Network			3	3
Penal Facilities		3		3
Public Safety Training & Facilities		2	1	3
Facilities Protection Services			1	1
Security & Law Enforcement		1		1
Total	175	95	2,555	2,825



Figure 2-43 STATUS OF ISFF PROJECTS Source: IRMO Rollup (12/30/2006)



Sector	Not Started	Ongoing	Completed	Total
Training and Operations	2	185	126	313
Infrastructure	3	21	51	75
Sustainment		19	10	29
Equipment and Transportation		6	2	8
Total	5	231	189	425

Note:

ISFF projects are compiled by totaling and grouping projects from both ISFF FY 2005 and ISFF FY 2006.

initial force-generation plans for the Ministry of Interior and the Ministry of Defense are expected to be completed by the end of 2006 when the effort will shift to replacing force losses and developing sustainment capacity.³⁰⁷

In addition to efforts by the United States and its Coalition partners, the GOI has announced an \$800 million initiative to expand the Iraqi Army by 3 division headquarters, 5 brigade headquarters, 20 battalions, and 1 special-forces battalion. This initiative should be completed within one year.³⁰⁸

CONSTRUCTION

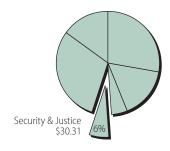
In this sector, IRRF has funded the construction and rehabilitation of border forts, fire stations, police stations, public-safety training academies, prisons and corrections facilities, courthouses, and witness-protection facilities.309 The last IRRF-funded construction project in the sector is scheduled to be completed by April 2008.³¹⁰

Last quarter, SIGIR Inspections identified a variety of construction deficiencies associated with the **Baghdad Police College** and health

Figure 2-44 SECURITY AND JUSTICE AS A SECTOR SHARE OF FY 2006 CERP FUNDS \$ Millions

% of \$511.16 Million

Source: Office of the Assistant Secretary of the Army Financial Management and Comptroller (9/30/2006)



concerns that required prompt attention. The original contractor has since left this project and been replaced, but a SIGIR follow-up inspection of the site this quarter identified similar and additional issues. Although repairs have been performed on this facility, other deficiencies have been reported.311 Warranty and repair work at the facility is expected to be completed by April 2007.312 Last quarter, SIGIR Inspections reported that construction of this site was not adequately designed and did not meet the original objectives or design standards (Inspection 06-072). For details on these inspections, see section 3 of this Report.



SECURITY AND JUSTICE



Dahuk Prison



Nassriya Prison

The Khan Bani Saad Correctional Facility, which can house 1,800 inmates, is estimated to be completed by June 2007, and the 800-bed Nassriya Correctional Facility is estimated to be completed by October 2007. However, the volatile security environment might delay the completion dates of both projects.³¹³ The renovation of the Zarka Rehabilitation Center in Dahuk is 91% complete.314

Finally, GRD-PCO reports this quarter that 114 border forts have been constructed thus far, and 5 points of entry have been completed.315 SIGIR's ground project surveys inspected 21 border forts and identified many

quality issues, including structural integrity, general absence of security perimeters, and poorly functioning facilities that failed to support operational requirements.³¹⁶

RULE-OF-LAW INITIATIVES

In addition to training and fielding the ISF, several initiatives are in progress to help enforce the rule of law in Iraq, including the development of an effective legal code and well-functioning judicial and correctional systems. The Coalition Police Assistance Transition Team, for example, has been working with the Iraqi Major Crimes Task Force and the Major Crime Units to strengthen the Ministry of Interior's capacity to conduct criminal investigations.317

DoJ has also been working with DoS to support the expansion and effectiveness of the Central Criminal Court of Iraq (CCCI). The CCCI has 12 panels operating throughout Iraq but focuses most of its work in Baghdad, processing an average of 118 insurgency-related cases each month.318





Private security forces are being increasingly relied upon by U.S. contractors in Iraq.

The DoS Bureau of International Narcotics and Law Enforcement (INL) budget for ruleof-law initiatives increased from \$88.6 million in FY 2006 to \$254.6 million for FY 2007. The largest portion of the funding (\$89.1 million) went to courts and criminal justice activities. The initiatives are designed to accomplish several goals, including:

- strengthening judicial independence
- supporting facility security to judges and court members
- providing secure housing for judges in Baghdad
- building court capacity through training

Other planned rule-of-law programs under INL management include:

- outreach and access to justice (\$49 million)
- corrections (\$31 million)
- anticorruption (\$27 million)
- justice integration (\$25 million)
- human rights (\$14 million)
- major crimes task force (\$11 million)³¹⁹

For more information on anticorruption, see the end of section 2 of this Report.

GRD-PCO also reported this quarter that 9 courthouse projects, 4 witness-protection security facilities, and 3 prison projects are in progress; 29 courthouse projects and 1 witness-protection security facility have been completed.320

Outputs of Programs Funded by IRRF and **ISFF**

Outputs of U.S. projects in this sector include completing construction and refurbishments to various facilities, as well as fielding, training, and equipping Iraqi military and police forces.

FIELDING AND EOUIPPING TRAINED TROOPS AND POLICE

As of January 8, 2007, 323,000 Iraqi military and police forces have been trained and equipped for security operations:

- 134,700 Iraqi Army, Navy, and Air Force personnel321
- 188,300 police, highway patrol, and other Ministry of Interior officers³²²

The goal of the Ministry of Interior is to field 188,260 trained and equipped personnel; the force-generation plan under the Ministry of Defense proposes an end-strength of approximately 137,500 soldiers. However, the "actual number of present-for-duty soldiers is significantly lower due to scheduled leave,



absence without leave, and attrition."323

The Coalition uses Transition Readiness Assessment (TRA) metrics to gauge the capacity of the ISF in the field. These assessments are based on "a variety of criteria similar to but not identical to what the U.S. Army uses to evaluate its units' operational readiness by focusing on personnel, command and control, training, sustainment/logistics, equipment, and leadership."324 However, these metrics have changed over time as key personnel rotate, equipment is added or replaced, and the tempo of unit operations changes.

Because the unit-level TRA assessments are not provided by DoD,325 this Quarterly Report will not assess the unit-level readiness of the ISF in terms of personnel, command and control, equipment, and leadership.

According to DoD, the ISF is increasingly taking the lead in operations. As of November 13, 2006, 91 Iraqi Army battalions had been assessed as capable of leading counter-insurgency operations. Also, of the National Police's 27 authorized battalions, 5 are in the lead in their respective areas of responsibility.³²⁶ Finally, GAO reported that "7 Iraqi army division headquarters and 30 brigade headquarters had assumed the lead by December 2006."327

TRAINING INITIATIVES

In December 2006, the Iraqi police force graduated 8,708 officers from its basic training course. In addition, 2,462 students completed the Transition Integration Program course. By the end of 2006, approximately 151,000 police recruits had graduated from the basic

training course.328 Personnel management issues, however, make it difficult for officials at the Ministry of Interior to know the number of police officers on duty at any given time. The Coalition also estimates that attrition will continue to hover around 20% per year,³²⁹ which significantly impacts the overall capacity of the police force.

In addition to in-class training, 177 Police Transition Teams (PTTs) are operating throughout Iraq. These teams include International Police Liaison Officers who travel to police stations throughout Iraq to assist with in-station training and development. In addition to the PTTs, there are 28 Border Transition Teams and 39 National Police Transition Teams.330

Complementing the traditional police component in Iraq, the National Police is a paramilitary force that bridges the gap between the police and the military. The National Police have been trained primarily for paramilitary operations and are experienced in fighting the insurgency. Nevertheless, there have been numerous accusations of human rights abuses and other illegal activities. Elements of the Iraqi Police Service and the National Police, for instance, are known to support Shia death squads by facilitating freedom of movement and providing advance warning of upcoming operations.331 To help combat such sectarian infiltration, a three-step phased training process was initiated in early August 2006 for the National Police. Additionally, the National Police Transformation and Retraining program began in October 2006.332 DoS reports that more than 26,000 members of the National



Police have completed initial training, as of the end of the quarter.³³³

Three Iraqi Training Battalions have been formed and are fully operational for Iraqi Army units, allowing the Iraqis to independently train soldiers in sufficient quantities to meet force generation and replacement needs. After a 13-week program of basic training, soldiers receive additional instruction based on their specific occupations; the length of this specific training ranges from three to seven weeks.334

In mid-December, Lt. Gen. Martin Dempsey, the MNSTC-I commander responsible for training and equipping the ISF, noted that a four-phased training program has been launched for the Iraqi Army. Its goal is to provide the members of the Iraqi Army with the necessary information and training to be better prepared to interact with the local population.335

Finally, MNSTC-I has trained and equipped approximately 28,300 Department of Border Enforcement (DBE) and Department of Ports of Entry personnel, an increase of 4,400 since August 2006. Although these two departments have not made much progress in improving the TRA ratings of their personnel, the DBE is now in the lead on Iraq's borders. Thirteen of 14 land points of entry are now functional.³³⁶

INFRASTRUCTURE SECURITY

The United States has invested more than \$320 million to improve Iraq's capacity to protect its oil and electric infrastructure, as SIGIR reported in Audit 06-038 (September 2006).

U.S.-funded initiatives include training and equipping the Strategic Infrastructure Battalions (SIBs) and partnering Coalition forces with Iraq's various energy infrastructure protection forces.³³⁷ The Ministry of Defense established 17 SIBs, and U.S.-funded projects have trained and equipped 11 of those.³³⁸

Besides SIBs, the Facilities Protection Service (FPS) protects stand-alone facilities administered by individual ministries (for example, security guards at a ministry building). Currently, approximately 150,000 FPS personnel are working for the other ministries and 8 independent directorates, such as the Central Bank of Iraq. DoD reported anecdotal evidence that some FPS personnel are unreliable, and some may even be responsible for violent crimes and other illegal activities.339 As a result, security reforms in 2007 will include helping the Iraqis consolidate the FPS under the control of the Interior Ministry.³⁴⁰ This will add to the estimated 17,800 FPS personnel already working for the Ministry of Interior.341

CONSTRUCTION

Last quarter, SIGIR reported that when all of the prison facilities currently underway are completed—tentatively scheduled for April 2007—Iraq's prison capacity is expected to increase by 4,800 beds. Despite this increased capacity, however, it is estimated that an additional 20,000 beds will still be needed to meet Iraq's correctional facility needs. This quarter, DoD reported that "pre-trial detention facilities are currently overcrowded, with



substandard facilities and poor accountability for persons detained."342

Three training academy projects have been completed, and two are under construction. The last training academy is scheduled to be completed in April 2007.³⁴³ But the largest training facility, the Baghdad Police College, has a number of significant infrastructure problems and may not be ready to transfer on schedule. For additional information on this project, see section 3 of this Report.

Outcomes of Programs Funded by IRRF and ISFF

To better assess the outcomes of IRRF- and ISFF-funded projects in the security and justice sector, this section reviews the current transition of security responsibilities to Iraqi control and the status of capacity development at both the Ministries of Interior and Defense.

TRANSITION TO IRAQI CONTROL

These transition events occurred this quarter:

- The governorate of Najaf was officially transferred to Iraqi control on December 20, 2006.344 Two other southern provinces-Wassit and Missan-are planned to be transferred by February 2007.³⁴⁵ The Thi-Qar and Muthanna governorates were transferred last quarter.
- Pending negotiations between the GOI and the Kurdistan Regional Government, security responsibility is expected to be transferred to the northern governorates of Dahuk, Erbil, and Sulaymaniyah.³⁴⁶

- Last quarter, SIGIR reported that the Iraqi Ground Forces Command assumed command and control responsibilities for the 8th Iraqi Army Division and the 4th Iraqi Army Division in mid-September. A third division was transitioned to Iraqi control in early December 2006.347 However, these units still require substantial logistics and sustainment support from Coalition forces.348
- As of October 2006, 52 of 110 Forward Operating Bases (FOBs) had been turned over to Iraqi control; an additional three FOBs were scheduled to be transferred by January 2007.349

The ISF is close to meeting the targeted number of 325,000 trained and equipped security forces, and more Iraqi army units are taking the lead for counterinsurgency operations. Attacks, however, continue on Coalition forces, the ISF, and civilians. These attacks reached record highs in October 2006 and continued at elevated levels through the end of the year.³⁵⁰

Additionally, the Iraqi Army is still unable to plan and execute logistics and sustainment requirements. As a result, the Iraqi Army will continue to rely on Coalition forces for "key assistance and capacity development, including quick-reaction reinforcement as required and provision of critical enablers, such as intelligence, air reconnaissance, and airlift support."351



CAPACITY DEVELOPMENT

As the initial force-generation plans for the Ministries of Defense and Interior approach completion, the focus has increased on developing Iraq's institutional capacity to direct, support, and sustain the ISF. This quarter, DoD reported that the Ministry of Defense is assessed as being "partly effective" at managing personnel, manning command and control, training, sustainment, logistics, equipping, and leadership. The overall TRA for the Ministry of Interior is also assessed as "partly effective." Nevertheless, DoD stresses that the transition teams of both Ministries are working to improve these assessments.352

The Coalition has also been working with both the Ministries of Interior and Defense to strengthen their logistics capabilities.³⁵³ SIGIR Audit report 06-032 showed last quarter that although the development of the logistics capabilities of the Ministry of Interior remains incomplete, MNF-I has made some progress in developing these capabilities for both the Iraqi Army and the Ministry of Defense. Despite this limited success, however, it is unlikely that MNF-I will meet its January 1, 2008 goal for the Ministry of Defense.

DoD also reports that force generation of Iraqi Army units is focused on combat enablers and logistics. For example, the Motorized Transportation regiments provide mobility and sustainment for Iraqi security forces; the final regiment was reported to have finished training in late October. As of December 2006,

DoD reported that seven of the nine planned regiments are operational and under Iraqi control.354

Challenges

The volatile security situation and attacks against critical infrastructure continue to pose a significant challenge to progress in this sector. Also, transitioning the ISF to functioning and self-sufficient Ministries of Interior and Defense has proven to be difficult thus far.

MITIGATING THE VIOLENCE

In late December 2006, DoD reported that since August 2006 the average number of weekly attacks increased by 22%, and most of the casualties were Iraqis. Nearly 54% of the violence occurred in Baghdad and Al Anbar.355 According to GAO, the average number of attacks per day has increased from approximately 70 in January 2006 to about 180 in October 2006.356 The UN Assistance Mission for Iraq (UNAMI) also reported that 6,376 civilians were violently killed in November and December 2006, a decrease from the approximately 7,054 killed in the September-October period. In 2006, 34,452 civilians were killed and 36,685 were wounded.357

The ineffectiveness of law enforcement and judicial systems has made the security environment worse. UNAMI continues to receive reports that militias have colluded with and infiltrated the ISF. To help mitigate this problem, the Ministry of Interior recently



established the Centre for Human Rights and Ethics to deal with government officials involved in corruption and human rights abuses.³⁵⁸

This quarter, DoD also reported that "conditions that could lead to civil war do exist, especially in and around Baghdad, and concern regarding civil war runs high among the Iraqi populace."³⁵⁹

INFRASTRUCTURE SECURITY

Critical infrastructure remains a high-value target for insurgent attacks. Although the SIBs continue to increase in size and capacity, only one has been assessed as capable of planning and executing independent operations.³⁶⁰

DoD reported an average of one attack per week on critical infrastructure in the electric, water, and oil sectors. Although this is a decrease from previous quarters, Iraq's oil and electricity infrastructure nevertheless continue to be hampered by slow repairs to previously destroyed infrastructure, weak ministerial oversight, and persistent criminal activity. These attacks are also assessed as being "more effective," which results in more damage being inflicted per attack, thereby further diminishing facility output rates. ³⁶²

However, SIGIR Audit also reported last quarter that even if attacks ceased, other factors—such as criminal activity and the effect of aging and poorly maintained infrastructure on operating capability—would continue to adversely affect oil exports and the availability of electricity.

TRANSITIONING TO IRAQI CONTROL

Even though more Iraqi troops and police are trained, equipped, and fielded, it is unclear whether these forces and troops can sustain a secure environment independent of Coalition forces. Lt. Gen. Dempsey stated in mid-December that one of the main reasons units refused to deploy to Baghdad was that "they did not feel like they had been trained to do that."³⁶³

The ability to field security forces in operations also appears to be a continuing challenge in Iraq. One challenge relates to the maintenance of force levels. The Iraqi Army's available-for-duty numbers are not released, but trained figures are annotated as being lower due to AWOL status and attrition. Heave and "immature personnel management policies" may account for up to 40% of police not being present for duty. Heave and "immature personnel management policies"

Also, national and local police apparently are infiltrated by, and possibly coordinated with sectarian militias, raising serious concerns about the integrity of the government's security services. He Gen. Dempsey recently estimated that 20-25% of the National Police "needed to be weeded out."

Finally, recent surveys suggest that public confidence in the ability of the GOI to provide for public safety and the rule of law is below 40% nationwide. In Sunni and mixed Shia-Sunni areas of the country, that number is even lower.³⁶⁸

To help combat this transitioning challenge, a series of continuing training, mentoring,

SECTOR SUMMARIES



and imbed programs have been implemented. Force and leadership reorganization and reorientations also are continuing. In addition to rationalizing the integration of various security organizations and commands, such as for the FPS and the National Police, processes for vetting and refining personnel roles are ongoing.369

SECTOR SUMMARIES





STATUS OF HEALTH CARE

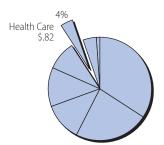
U.S. reconstruction spending in this sector has focused on building, rehabilitating, and equipping medical facilities, as well as providing immunization, training, and other health services.

SIGIR makes these observations about activities in the health care sector this quarter:

- More than 70% (\$.58 billion) of the sector's nearly \$.82 billion was expended by the end of this quarter.
- Approximately 38% of all projects in this sector that were funded by the IRRF have been completed, but progress on construction projects has been slowed considerably by security and management problems.
- Only 8 of 142 planned model Primary Healthcare Centers (PHCs) have been completed to date. 126 PHCs are currently under construction, and 8 have stopped work for various reasons.

Figure 2-45
HEALTH CARE SECTOR AS A SHARE OF IRRF FUNDS \$ Billions % of \$18.44 Billion

Source: IRMO, Weekly Status Report (1/2/2007)



Of the 20 hospitals undergoing rehabilitation, 12 had been completed as of December 2006.

SIGIR also sees these challenges in this sector:

- Security issues continue to pose a serious threat to the health care sector and hinder the effectiveness of U.S.-funded projects.
- The procurement and distribution of medicine and medical equipment remain susceptible to corruption and inefficiencies.

Figure 2-45 shows sector funds as a percentage of the IRRF.



Figure 2-46 **STATUS OF IRRF FUNDS - HEALTH CARE**\$ Billions

Source: IRMO, Weekly Status Report (1/2/2007);

DoS, Iraq Weekly Status (9/27/2006)



Figure 2-47 **STATUS OF IRRF HEALTH CARE PROJECTS**Source: IRMO Rollup (12/30/2006);

USAID Activities Report (December 2006)



Sector Projects	Not Started	Ongoing	Completed	Total
Primary Healthcare Centers		133	8	141
Equipment Procurement		2	62	64
Hospitals	1	10	15	26
Nationwide Hospital and Clinic Improvements	S		3	3
Total	1	145	88	234

Activities in the Health Care Sector

As of January 2, 2007, almost all of the sector's IRRF funding had been obligated, and more than 70% had been expended. By December 2006, 88 of 234 health care sector projects were completed.³⁷⁰ Security delays, less-than-adequate contractor performance, and lapses in oversight have significantly limited construction initiatives. Figure 2-46 shows the status of sector funds.

Figure 2-47 shows the status of IRRF projects in the health care sector.

CERP funds are also used to support projects in this sector. Almost all of the \$25.9 million CERP funding had been obligated, and 30% had been expended as of September 30,

2006. Additionally, 125 CERP-funded projects had been completed, 106 were ongoing, and 7 were yet to start as of that same period. Figure 2-48 shows sector funds as a percentage of the CERP.

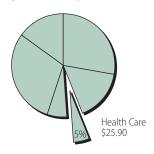
Key Projects Completed and Underway

Activities in this sector include constructing and refurbishing PHCs and hospitals throughout Iraq, as well as supplying those facilities with medical equipment and training medical practitioners and government officials appropriately. Past activities in this sector also included vaccination programs.



Figure 2-48 **HEALTH CARE SECTOR AS A SHARE OF FY 2006 CERP FUNDS** \$ Millions % of \$511.16 Million

Source: Office of the Assistant Secretary of the Army Financial Management and Comptroller (9/30/2006)



MODEL PRIMARY HEALTHCARE CENTERS

The planned total number of PHCs was 142— 141 funded by IRRF 2 and 1 by CERP.³⁷¹ After the PHC design-build contract was terminated for convenience of the government for all but 7 of these PHCs, GRD-PCO re-awarded the remaining 135 to local Iraqi firms under fixedprice contracts.

Last quarter, GRD-PCO reported to SIGIR that 37 PHCs were slated for completion by the end of November 2006;372 that goal, however, had not been met as of December 2006.373 In addition, construction for eight PHCs began but is currently on hold.³⁷⁴ The delay is caused by a variety of issues associated with contractor changes and security conditions. Some construction work performed by the previous contractor needed to be rectified as punch-list items³⁷⁵ and re-awarded contracts. In addition, there have been transition issues between old and new subcontractors related to payments for services previously rendered.³⁷⁶ Electrical connections are difficult to obtain at some construction sites because of high fees and nonstandardized procedures to obtain permits. GRD-PCO reported that IRMO is currently working to achieve permanent solutions to the utility connection issues.377

Of the eight PHCs completed to date, seven are currently open to the public. Of the unfinished PHCs, 50 are 90-100% complete, and 46 are 75-90% complete. The remaining 38 are at various stages of completion, ranging between 17% and 75%.378

Overall, the PHC program administered by GRD-PCO is 81% complete and is estimated to be finished by December 2007.³⁷⁹

HOSPITALS

The hospital rehabilitation program has also been delayed, but it has made more progress than the PHC program. The hospital program's original goal was to renovate 17 hospitals. In December 2004, this number was increased to 20 hospitals, which will be renovated in 26 projects.³⁸⁰ Currently, GRD-PCO oversees the refurbishment of 20 hospitals under the original design-build contract and the construction of one hospital that was previously managed by USAID.

Of the 20 hospitals under the original design-build contract, 12 have been completed by the contractor. Because of slow construction progress, the other eight were re-awarded as fixed-price contracts to Iraqi contractors in May 2006, using IRRF funds. This quarter, GRD-PCO reported that the hospital rehabilitation projects were scheduled to be completed by the end of 2006. However, the schedule has slipped beyond the deadline for several reasons: modifications to the installation of air systems for the remaining hospitals, security





Sign at the Al Alwaiya Maternity Hospital in Baghdad, which reads, "Ministry of Health, Teaching Hospital for Maternity Health." A SIGIR inspection this quarter found that renovations were performed appropriately and that when complete, the hospital should improve health care services in Baghdad.

issues impeding construction work at various sites, and the financial settlement between the design-build contractor and its subcontractors.381 GRD-PCO reported that all hospital rehabilitations in its hospital program are currently 87% complete; completion is expected by May 30, 2007.³⁸²

SIGIR reports in Inspections 06-064 and 06-065 that construction of both the Al Alwaiya Maternity and Children's Hospitals was welldesigned, consistent with the design standards, and had effective quality control and management. For additional information, see section 3 of this Report.

The Basrah Children's Hospital has encountered significant project delays and slippages. GRD-PCO is currently managing the project as a fixed-price contract to MIDCON, a Jordanian firm.383 GRD-PCO reported to SIGIR that 34% of the construction at this site was completed as of December 29, 2006.

In addition to the construction activities on this project, there is also a medical equipment integration contract for which Project HOPE provides \$30 million in major medical equipment. Construction, equipment installation, and staff training are expected to be completed by November 2008, followed by a phased opening starting in early 2009.384

NON-CONSTRUCTION ACTIVITIES

U.S.-funded projects have allocated \$214 million to procuring health care equipment, modernization, and training. As of December 30, 2006, \$171 million had been expended in this subsector.³⁸⁵ Medical equipment contracts have been awarded for 18 hospitals across Iraq, totaling approximately \$24 million. Equipment was also purchased for the Najaf Teaching **Hospital** for \$1.2 million.³⁸⁶ In addition, medical equipment was installed and com-



missioned at the 20 constructed or partially constructed PHCs, and basic training was provided for the use and maintenance of this equipment.387

This quarter, SIGIR Audit 06-030 identified six non-construction contracts awarded to various contractors for a combined value of \$43 million. Three of these contracts were affected by the termination of the PHC construction task orders, and \$38 million had been expended for them. For more information on the effects of the termination, see section 3 of this Report.

USAID's non-construction activities were extended through the end of December 2006 to provide training for health-care providers. The Training Model Primary Providers activities surged from September until mid-November 2006. During that period, 2,839 health-care

service providers were trained in a range of topics. USAID reports that the number of trainings met the target because of the efforts and cooperation of the Ministry of Health.³⁸⁸

Outputs of IRRF-funded Health Care Projects

HEALTH CARE FACILITIES

To date, only seven IRRF-funded PHCs are serving patients.³⁸⁹ The PHC program was expected to provide health care services to an annual average of approximately 35,000 people, or 110 people per clinic daily.³⁹⁰ Currently, most of the operational PHCs are meeting their respective capacities.³⁹¹

Table 2-12 summarizes the status of health care facilities funded by IRRF 1 and IRRF 2.

IRRF-funded Health Care Facility Construction: Current and Planned

HEALTH CARE FACILITIES	CURRENT STATE, AS OF 12/29/06	IRRF PLANNED END-STATE
Hospitals Rehabilitated	12	20
Hospitals Built	In progress	1
Primary Healthcare Centers Rehabilitated	147	147
Primary Healthcare Centers Equipped	600	600
Small Primary Healthcare Centers Built and Equipped	6	6
Model Primary Healthcare Centers Completed to Operational Stage	7	142

Sources: GRD-PCO, response to SIGIR, January 4, 2007 (Hospitals and Model PHCs); DoS Section 2207 Report, Tab 5 (Selected Metrics), October 2006, p. 15 (all other data).



NON-CONSTRUCTION PROJECTS

In addition to construction and rehabilitation of medical facilities throughout Iraq, medical and dental equipment were to be installed for all PHCs. To date, approximately \$75.4 million of medical equipment and furniture sets have been purchased and delivered.³⁹² The equipment and these furniture sets, however, have not yet been installed at their respective sites; instead, they are being warehoused for future installation. SIGIR Audit 06-030 reports that, as of July 30, 2006, 130 medical sets had been delivered to a U.S. government-controlled warehouse.

USAID programs have also supported training programs for health-care service providers and their staff; vaccination campaigns for polio, measles, mumps, and rubella; and provided vaccine supplies to ensure the availability of routine immunizations.

Outcomes of IRRF-funded Health Care Projects

Construction at various hospital sites is making progress following the re-awarding of those contracts to local Iraqi firms, as shown in SIGIR Inspections 06-064 and 06-065, as well as last quarter's Inspection 06-066. One notable exception, however, is the Basrah Children's Hospital, which SIGIR Audit 06-026 (July 2006) reported as being significantly behind schedule.

The Model PHC Program is reportedly progressing at a much slower rate and has provided only one additional PHC for use by Iraqi patients since last quarter. For additional information on issues associated with PHC construction, see SIGIR Audit 06-011 (April 2006).

Activities in this sector were initially hindered by U.S. government mismanagement and design-build contractor performance and in executing and completing the tasks outlined in the reconstruction contracts. These issues most significantly impacted the Model PHC Program. Overall, the long-term impact of these projects will be better assessed after the hospital and PHC construction programs are complete.

Challenges

Security poses a significant threat in the health care sector, particularly because of the growing sectarian divide in Iraqi society. In November 2006, the Deputy Health Minister of the Dawa Party was kidnapped in Baghdad, and another Deputy Minister barely escaped assassination the next day.³⁹³ According to news accounts, 30 insurgents laid siege to the Ministry of Health headquarters later that week.³⁹⁴ Additionally, medicine and equipment procurement and distribution are operated by state-owned enterprises that are susceptible to inefficiency and possibly even corruption.³⁹⁵



STATUS OF TRANSPORTATION AND COMMUNICATIONS

This section examines the progress of reconstruction in the transportation and communications sector. Projects in this sector aim to improve transportation systems in Iraq, such as shipping, railways, roads, bridges, and airports. This sector also includes U.S.-funded telecommunications projects.396

SIGIR makes these observations about progress in the transportation and communications sector this quarter:

- As of January 2, 2007, more than 67% of the nearly \$800 million in IRRF funds allocated to this sector had been expended. Figure 2-49 shows sector funding as a portion of total IRRF allocations; sector projects are currently 83% complete.
- As of December 2006, U.S. reconstruction efforts at the Port of Umm Qasr were 86% complete.

U.S. projects have completed repairs at 90 of 98 railway stations, but the effects of these projects are not yet apparent. Although the weekly average number of train trips was 45 during the quarter, only a small number of trains continue to run nationwide because of security concerns.

- Projects at the Basrah International Airport continue to make progress and are expected to be completed by September 2007; projects at other airports have been completed.
- Iragis continue to subscribe to mobile phone services at a rapid pace although the number of landline subscriptions has remained constant. More than 8 million Iraqis now have access to mobile phone service.

Figure 2-49 TRANSPORTATION AND COMMUNICATIONS SECTOR AS A SHARE OF IRRF FUNDS \$ Billions % of \$18.44 Billion Source: IRMO, Weekly Status Report (1/2/2007)

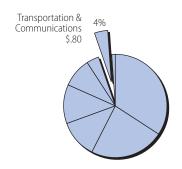
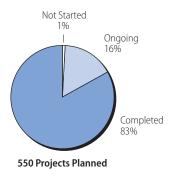


Figure 2-50 STATUS OF IRRF FUNDS -TRANSPORTATION AND COMMUNICATIONS \$ Billions Source: IRMO, Weekly Status Report (1/2/2007); DoS, Iraq Weekly Status (9/27/2006)





Figure 2-51 **STATUS OF IRRF TRANSPORTATION AND COMMUNICATIONS PROJECTS**Source: IRMO Rollup (12/30/2006);
USAID Activities Report (December 2006)



Sector	Not Started	Ongoing	Completed	Total
Roads and Bridges	6	67	215	288
Railroad Rehabilitation & Restoration		8	90	98
Consolidated Fiber Network			94	94
Telecommunications Business Modernization	1	1	32	34
Civil Aviation		5	14	19
Umm Qasr Port Rehabilitation		2	9	11
Expressways		4		4
Telecommunications Operations/Regulatory Reform			1	1
Telecommunications Systems		1		1
Total	7	88	455	550

Activities in the Transportation and Communications Sector

As of January 2, 2007, almost all of the sector's IRRF funding had been obligated, and approximately \$540 million had been expended. Figure 2-50 shows the status of sector funds.

Construction in this sector is expected to be completed by December 2008.³⁹⁷ For the status of projects in this sector, see Figure 2-51.

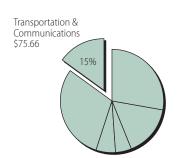
CERP funds are also used to support projects in this sector. As of September 30, 2006, almost all of the \$75.66 million CERP funding for this sector had been obligated, and approximately \$25 million had been expended. Also, 318 CERP-funded projects had been completed, and 238 were ongoing. Four projects have not yet begun. For a breakdown of CERP funding in this sector, see Figure 2-52.

TRANSPORTATION AND COMMUNICATIONS SECTOR AS A SHARE OF FY 2006 CERP FUNDS

\$ Millions

% of \$511.16 Million

Source: Office of the Assistant Secretary of the Army Financial Management and Comptroller (9/30/2006)





SHIPPING ACTIVITIES

Shipping projects have focused on improving the Port of Umm Qasr with rehabilitations and equipment funded with \$45 million of the IRRF; all funds were obligated last quarter.398 GRD-PCO has completed five of seven projects, and the overall program is 86% complete.³⁹⁹ The \$4.3 million security fence project has been completed; fire fighters have been trained to operate fire boats; and contracts have been awarded for vehicles, crane motors, and security upgrades. 400 Finally, 86% of refurbishment work on the Nelcon cranes/ spreader had been delivered, as of December 29, 2006.401 The shipping program is expected to be finished in February 2007.402

Outputs of IRRF-funded Shipping Projects

As a result of U.S.-funded projects, 16 docks are now in operation; only one dock was functional at the end of the war. 403 Other projects focus on enhancing handling capacity and operational efficiency, as well as augmenting security to provide a more reliable flow of cargo in and out of port.404

Outcomes of IRRF-funded Shipping Projects

Although SIGIR did not receive any data on the number of ships berthed at the port this quarter, Umm Qasr remains a busy port with long queues of ships waiting to dock. The GOI is considering constructing a new port with approximately 100 berths on the Al-Faw peninsula. At the time of this Report, no construction had begun, and the project remains in the planning phase.405



Oil tanker loading at Al Basrah Oil Terminal at the Port of Umm Qasr. This is the major shipping port for Iraq.

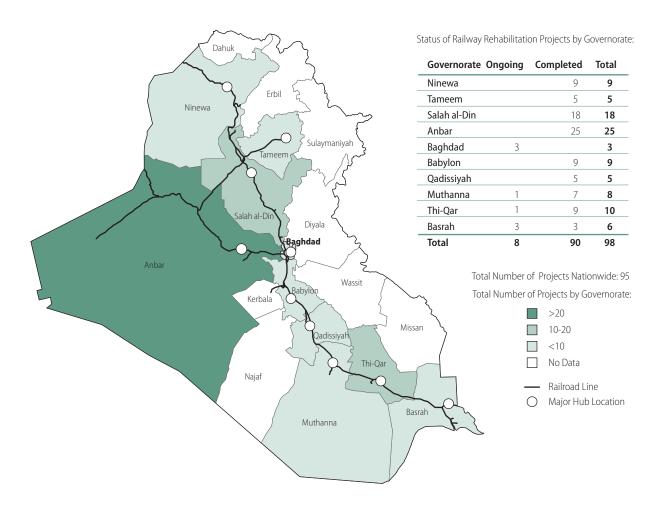
RAILWAY ACTIVITIES

As of September 2006, allocations in this subsector amounted to \$197 million. In October 2006, DoS reported that \$1.2 million had been reallocated to civil aviation for upgrades to the Basrah International Airport. 406 The bulk of expenditures in this sector-\$131 million—is for materials and equipment. Most of this funding has been used to purchase track maintenance equipment, spare parts, tools, and other materials.407

The Communications-Based Train Control System (CBTC) comprises two different contracts. Phase I of this \$57.6 million project valued at \$16 million and expected to be completed in September 2007, will provide the Iraqi Republic Railroad (IRR) with a train control system for tracking movement of all locomotives on the rail system. The project is currently 88% complete. 408 To allow the contractor to start installation of the backbone



Figure 2-53 **RAILROAD STATION REHABILITATION PROJECTS BY GOVERNORATE**Source: IRMO Rollup (12/30/2006), GRD-PCO, Response to SIGIR, 1/18/2007



system, 33 site surveys have been completed for the communication towers between Mosul and Basrah.⁴⁰⁹ Phase II will provide a \$41.6 million Digital Microwave Radio Communications Network (also referred to as the **CBTC-backbone**); work has not yet begun.⁴¹⁰

In other construction activities, \$9 million worth of upgrades at the **Samawa Mainte-nance Shop** were completed,⁴¹¹ and a \$33,000

contract modification to address the additional work at **Baghdad Central Railway Station** was issued on December 22, 2006.⁴¹² For the railway station projects by location, see Figure 2-53.

Outputs of IRRF-funded Railway Projects

U.S. projects have helped bring the number of operational locomotives to 125; immediately



after the war, only 25 were reported in Iraq. 413 Although most funding for Iraqi railway projects has been allocated for non-construction initiatives, construction projects have nevertheless repaired 90 of 98 planned stations under this \$51 million program. 414

Outcomes of IRRF-funded Railway Projects

This quarter, an average of 45 trains ran per week—up from last quarter's average of 27 per week. Although daily round-trip passenger service resumed between Basrah and Hilla after Ramadan, there has been limited passenger traffic between Mosul and Rabiya.

Despite the increase in rail travel this quarter, the rate is still far below the planned number of trains for previous quarters. This shortfall is primarily caused by poor security conditions, which continue to hinder the flow of rail traffic in Iraq. No trains have operated along the Baghdad-Basrah-Umm Qasr route since February 2006. The railway is also vulnerable to insurgent threats at Baiji and Dora, which affects the capacity of train operations. The IRR employees and staff abandoned the Dora facility in November: it was immediately looted.

AIRPORT ACTIVITIES

Civil aviation has been allocated \$80 million in IRRF funding, which includes reallocations of \$13 million from different initiatives, such as the Umm Qasr Port Rehabilitation, Railroad Rehabilitation, Iraq Telecommunications and Postal Corporation, and several security



Sign at the Baghdad Central Railway Station. No trains have operated on the Baghdad-Basrah route since February 2006.

projects. Funds were reallocated to aviation because projects in this subsector were more tangible, and the projects had been making good progress. 420 Also, the contractor bids for work planned at Baghdad International Airport were higher than estimated. 421

This quarter, the \$7 million **Visual Aids** project was completed at the Baghdad International Airport. A number of training programs for **Iraqi Civil Aviation Authority** employees also took place this quarter, which included air worthiness inspection, radar operations and maintenance, and a 22-week intensive program in air traffic control communications skills. 422

Most of these reallocated funds are slated to support upgrades to **Basrah International Airport (BIA)**.⁴²³ BIA projects were agreed to be of high priority and received funding from other subsectors and sectors once resources became available.⁴²⁴

Three new projects were started this quarter at BIA, including upgrades and repairs of navigational aids and communications, a new radar





Baghdad Central Railway Station. SIGIR inspectors reviewed the renovations at this facility in Summer 2006.

system, and renovations to the airport's water system. These projects are expected to be completed by September 2007. The terminal and tower renovation project is 95% complete, and final completion is scheduled for May 2007. 425

Table 2-13 summarizes the work done at the Baghdad, Basrah, and Mosul airports. U.S.-led reconstruction efforts in this subsector are near completion.

Outputs and Outcomes of IRRF-funded Air Transportation Projects

During this quarter, the Baghdad International Airport averaged 423 flights per week⁴²⁶—a decrease from last quarter's 473—including both military and civil operations.

IRMO reports that BIA has experienced an increased number of attacks because British

troops have redeployed there as a result of British base closures throughout the south. 427

ROADS AND BRIDGES

U.S.-funded projects in this subsector will not be completed until December 2008. The projects have focused on small village roads, several key highways, and bridges.⁴²⁸

Key Road and Bridge Projects Completed and Underway

Construction of the **Al Hamza Bridge** was completed in early October 2006. The highway between Baghdad and Kirkuk will be upgraded to four lanes by December 2008. Also, Diwaniya and Al-Samawa will be connected by an upgraded four-lane highway;



STATUS OF U.S.-LED PROJECTS AT IRAQI AIRPORTS, AS OF 12/31/2006

AIRPORT	CONTRACT SIZE	# PROJECTS	EST. COMPLETION DATE	STATUS
Baghdad	\$17 million	7	October 2006	100% Complete
Basrah	\$25 million	10	September 2007	55% Complete
Mosul	\$10 million	1	September 2006	100% Complete

Source: GRD-PCO, response to SIGIR, January 17, 2007.

TABLE 2-13

this \$15.5 million project is scheduled to be completed in February 2008.430

The Village Roads Program, budgeted at \$38.5 million, will improve 263 miles of roads throughout 15 governorates in Iraq. 431 Originally scheduled to be completed by August 2006,432 the project is now estimated to be finished by July 2007. The program was delayed by security problems and a lack of construction resources, such as bitumen, asphalt, and fuel.433 In 2006, SIGIR inspected various Village Roads projects (06-039, 06-055, and 06-059) and concluded that construction was consistent with the contract objectives and met the design standards.

Provincial Reconstruction Development Committees (PRDCs) prioritize the road projects in their respective governorates, and the projects issued through them are making progress. 434 There are currently 56 projects valued at \$56.5 million, and 6 have been completed to date.435 This quarter, a \$2.5 million ESF project was approved for the Technology Exchange Center (formerly named **Technology** Transfer Center, or T2C). This funding will be spent mainly on soft projects, particularly implementing government capacity-building and training initiatives. The Technology

Exchange Center is located at the Ministry of Construction and Housing, 436 and the Ministry is partnering with the U.S. Federal Highway Administration.437

Outputs of IRRF-funded Road and Bridge Projects

U.S.-led road and bridge projects are expected to repair and pave 464 miles of road, including 261 miles of village roads, 112 miles of city carriageways, and 91 miles of major roads. 438 Ten bridges are slated to be repaired by the end of the reconstruction program—eight from IRRF funding and two from DFI funding.439

GRD-PCO reports that five PRDC projects—four roads and one bridge—were completed this past quarter for a total of four miles.440

TELECOMMUNICATIONS

Projects to modernize the Iraq Telecommunications and Postal Commission were funded with \$20 million from IRRF, and all funds have been obligated, as of September 2006.441 This includes 34 projects that focus on constructing and renovating post offices. At the end of this quarter, the projects were 80% complete, up from 65% last quarter. The last

SECTOR SUMMARIES



post office project is expected to be completed in July 2007. 442 When finished, the projects are expected to bring mail service to approximately one million Iraqis. 443

The Iraqi Telecommunications System was allocated \$48 million, almost all of which was obligated by the end of this quarter. 444 This funding is being used to construct a primary switching facility at Al-Mamoom and a wireless broadband network (WBBN). The \$26 million switch facility was 13% complete, as of December 29, 2006, and is estimated to be finished by September 2007.445 Construction for the Al-Mamoom Telephone Exchange facility also started this quarter.446 In late September, O&M support began to supply labor, materials, equipment, tools, management, transportation, and security to the WBBN Network for 35 Iraqi ministries. The project is currently 50% complete.447

According to the October DoS *Section 2207 Report*, the funding allocation for the Consolidated Fiber Network (CFN) was decreased to \$50 million in October 2006. Those funds were to be transferred to the health care sector to support completion of the Basrah Children's Hospital. However, a contract valued at \$1 million was awarded for the CFN O&M.⁴⁴⁸

To modernize the Iraq telecommunications operations system and support a regulatory agency, the Communications and Media Commission (CMC) was allocated \$20 million. Last quarter, the CMC headquarters was completed

and furnished in December 2006.⁴⁴⁹ A contract (\$2.5 million) for training all CMC staff was also awarded, along with a \$4.7 million contract for LAN equipment.⁴⁵⁰

Outputs and Outcomes of Telecommunications Projects

After the CMC is restructured, the Ministry of Communications will likely manage telecommunications regulatory functions, operating licensing, and the wireless spectrum. The CMC will retain responsibility for oversight of the media and broadcast licensing. 451 One of the priorities of the Ministry of Communications and CMC is to extend the wireless local loop network in the volatile Anbar governorate. 452

Although the United States has provided some funding for wireless licenses, most of the development of the mobile phone infrastructure has come from the private sector. Mobile phone subscribers continue to increase at a rapid pace, from 7.2 million last quarter to

CURRENT TELEPHONE SUBSCRIBERS VS. PRE-WAR LEVELS

OUTPUTS METRIC	Pre-war Level (2003)	LAST QUARTER STATUS, AS OF 9/26/2006	CURRENT STATUS, AS OF 1/2/2007
Landline Subscribers	833,000	1,046,027	1,046,027
Mobile Phone Subscribers	80,000	7,214,650	8,712,027

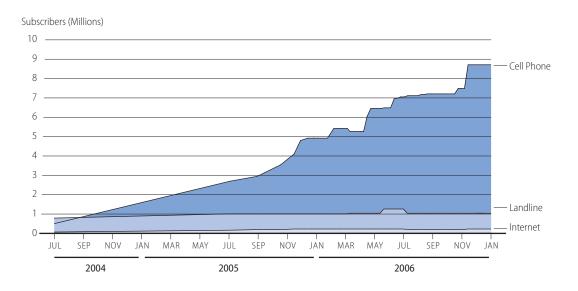
Sources: Pre-war Levels: Economist Intelligence Unit, Country Profile 2005-Iraq, 2005, p. 34; International Telecommunication Union, World Telecommunication/ICT Indicators, no date, p. A-30. Available online at http://www.itu.int/ITU-D/ict/statistics/at_glance/cellular03.pdf; last quarter status: IRMO Iraq Weekly Status Report, September 26, 2006, p. 23; current status: IRMO, Iraq Weekly Status, January 2, 2007, p. 23.



more than 8.7 million this quarter. The number of landline telephone subscribers, however, stayed constant this quarter. Currently, there are an estimated 230,000 internet subscribers in Iraq,⁴⁵³ using the State Company for Internet Services. Most Iraqis gain internet access through cafes and hotels.

Figure 2-54 shows the steady rise in cell phone subscribers, and Table 2-14 compares the current number of telephone subscribers with pre-war levels.

Figure 2-54 STATUS OF IRRF FUNDS - TRANSPORTATION AND COMMUNICATIONS Source: IRMO, Weekly Status Report (1/2/2007); DoS, Iraq Weekly Status (9/27/2006)



SECTOR SUMMARIES



CONTRACTS

The Iraq Reconstruction Accountability Act of 2006 expanded SIGIR oversight to include ISFF, CERP, ESF, and other FY 2006 reconstruction-related funding activities. As a result, SIGIR is increasing its efforts to collect contract data to account for these funds.

This quarter, SIGIR compiled more than 10,000 contracting actions funded by IRRF and ISFF, totaling approximately \$21 billion in obligations and \$16 billion in expenditures. The initial data collection effort for CERP and ESF produced summary-level reports that lacked

contract-level detail. SIGIR will continue to report on IRRF and ISFF contracts and collect contract data for CERP and ESF activities.

To date, approximately \$18 billion of the IRRF has been obligated, and more than \$6.5 billion of ISFF funds has been obligated. At a contract level, SIGIR can account for 81% of IRRF monies and 98% of ISFF monies.

Table 2-15 summarizes IRRF and ISFF contracting actions recorded in the SIGIR Iraq Reconstruction Information System (SIRIS) through January 7, 2007.

SUMMARY OF IRRF AND ISFF CONTRACTS IN SIRIS (S BILLIONS)

		OBLIGATED	Expended	UNEXPENDED
IRRF				
	GRD Construction	\$7.74	\$5.63	\$2.11
	GRD Non-construction	4.08	3.49	0.59
	USAID	2.92	2.53	0.39
	Subtotal	\$14.74	\$11.65	\$3.09
ISFF				
	ISFF 2005	5.17	4.19	0.98
	ISFF 2006	1.30	0.58	0.72
-	Subtotal	\$6.47	\$4.77	\$1.7
Total		\$21.21	\$16.42	\$4.79

Contractor Analysis for IRRF

Table 2-16 shows the top ten contractors receiving IRRF funds, as reported in SIRIS.

During this quarter, expenditures to Symbion Power LLC increased by nearly 50% for transmission projects in the electricity sector.

TOP 10 CONTRACTORS - IRRF (MILLIONS)

Contractor	OBLIGATED	Expended	Expended Previous Quarter	% Increase in Expenditures
Bechtel	\$1,262	\$1,113	\$1,049	6%
FluorAMEC, LLC	\$982	\$878	\$842	4%
Parsons Global Services, Inc.	\$733	\$610	\$610	0%
Parsons Iraq Joint Venture	\$658	\$456	\$389	17%
Kellogg Brown & Root Services, Inc.	\$560	\$482	\$435	11%
Washington Group International	\$531	\$427	\$389	10%
Development Alternatives, Inc.	\$440	\$436	\$436	0%
Environmental Chemical Corporation	\$354	\$349	\$346	1%
Anham Joint Venture	\$259	\$258	\$258	0%
Symbion Power LLC	\$249	\$49	\$33	48%

Contractor Analysis for ISFF

Table 2-17 shows the top ten contractors funded by ISFF. The largest ISFF contractor is Environmental Chemical Corporation, which reports more than 45% in undelivered funds on several ongoing training and operations projects for the Ministry of Defense and Ministry of Interior.

Innovative Technical Solutions, Inc., started most of its projects in October 2006; consequently, it reports the greatest percentage of undelivered orders—85% for the current quarter.

Appendix F lists contracting actions funded by IRRF and ISFF that have been recorded in SIRIS.

TOP 10 CONTRACTORS - ISFF (MILLIONS)

CONTRACTOR	OBLIGATED	Expended	Undelivered	% Undelivered
Environmental Chemical Corporation	\$434	\$236	\$198	46%
Aecom Government Services Inc.	\$236	\$212	\$24	10%
Toltest, Inc.	\$188	\$89	\$99	53%
AM General LLC	\$162	\$161	\$1	1%
Tetra International, LLC	\$160	\$109	\$51	32%
AMEC Earth & Environmental, Inc.	\$157	\$82	\$75	48%
Innovative Technical Solutions, Inc.	\$144	\$21	\$123	85%
Washington Group International	\$130	\$55	\$75	58%
O'Gara-Hess & Eisenhardt Armoring Co.	\$120	\$117	\$3	3%
BLP	\$116	\$79	\$37	32%

COST-TO-COMPLETE DATA

U.S. agencies executing reconstruction projects are required by Section 2207 of P.L. 108-106 to provide quarterly estimates of the cost to complete each IRRF-funded project. Cost-to-complete (CTC) data helps identify the funding status of all projects, both those that may exceed their budget and those that may be completed under budget, and allows management to prioritize activities.

In past Quarterly Reports, SIGIR highlighted CTC information from Project Assessment Reports (PARs). However, last quarter DoS reported CTC data only for projects managed by GRD-PCO; no CTC data was provided for projects managed by MNSTC-I or USAID. The same situation exists this quarter. As of January 20, 2007, SIGIR has not received the PAR for the quarter ending December 31, 2006. An IRMO official told SIGIR that only GRD-PCO will again provide data because both MNSTC-I and USAID have nearly finished their IRRF-funded projects, and the remaining projects are being implemented by GRD-PCO. For example, for IRRF-funded construction projects as of January 2, 2007, all but \$2.38 billion of the \$10.27 billion had been expended. Of this, \$2.24 billion belongs to GRD-PCO projects. Only \$120 million in USAID projects remains to be expended.

SOURCES OF FUNDING FOR IRAQ RECONSTRUCTION

SIGIR is required to report on the oversight of and accounting for funds expended in Iraq relief and reconstruction, under P.L. 108-106, Section 3001 (as amended). Relief and reconstruction activities are funded by three sources:

- U.S. appropriated funds: IRRF, CERP, ISFF, ESF, and other U.S. appropriated funds
- international donor funds
- Iraqi funds

As of December 31, 2006, SIGIR identified \$38.28 billion in total U.S. appropriated funds for Iraq as "relief and reconstruction." This includes \$20.91 billion in IRRF funding and \$17.34 billion in other U.S. appropriated funds. In the absence of an internationally recognized definition of "relief and reconstruction," SIGIR includes 26 non-IRRF activities that are related to relief and reconstruction—for example, the construction of U.S. military installations that will eventually be turned over to the Iraqis. SIGIR's current mandate includes oversight of \$32.96 billion of the \$38.28 billion in appropriated funding.

Table 2-18 presents the best information available for U.S. appropriated funding but does not provide a complete picture of all U.S. relief and reconstruction activities. SIGIR does not have complete information on funding for narrowly focused programs of some agencies or the use of agency operating funds for projects in Iraq. However, SIGIR made some estimates for selected accounts, which are reflected in the footnotes to the table.

As of December 31, 2006, international donor funds totaled \$15.21 billion—\$13.59 billion pledged at the 2003 Madrid Donors Conference and \$1.62 billion in post-Madrid pledges—not including humanitarian or other types of assistance

Iraqi funds comprise vested and seized funds, the Development Fund for Iraq (DFI), and the Iraq Capital Budget. Iraqi funds have been an important funding source for reconstruction efforts, particularly during CPA's tenure. As of December 31, 2006, these funds total \$50.45 billion, including:

- vested (frozen) funds of \$1.72 billion
- seized funds, including confiscated cash and property, of \$927 million
- DFI funds (including DFI sub-account), drawn primarily from oil proceeds and repatriated funds of \$23.04 billion
- budgeted Iraqi funding of \$24.76 billion from 2004 to 2007 (although much less has actually been expended)

Figure 2-55 provides an overview of all sources of Iraq reconstruction funding. More details are provided in Appendices G and H.

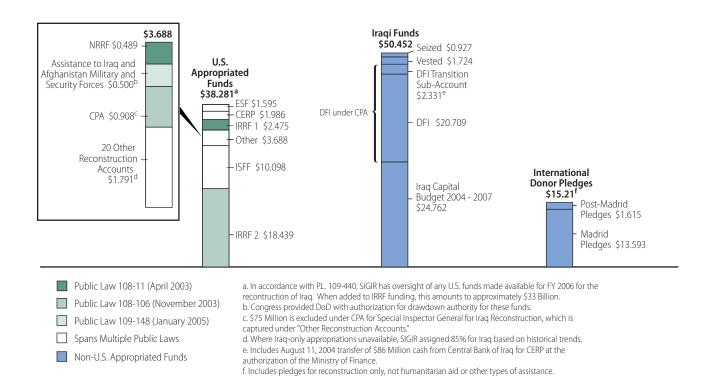
U.S. Appropriated Funding

Since the 2003 conflict began, Congress has passed eight bills that provided \$38.23 billion in Iraq reconstruction funding, excluding \$40 million in ESF funding from P.L. 108-7 counted toward reconstruction efforts before

the initiation of hostilities. On September 29, 2006, the President signed the most recent appropriation for the Department of Defense (P.L. 109-289). This included \$1.7 billion in ISFF funding and \$375 million for CERP. Historically, Congress has also included additional funding in each year's Department of State/ Foreign Operations bills. (FY 2007 appropriations had not yet passed at the time of printing this Report.)

Figure 2-55

SOURCES OF IRAQ RECONSTRUCTION FUNDING—\$103.924 BILLION
\$ Billions

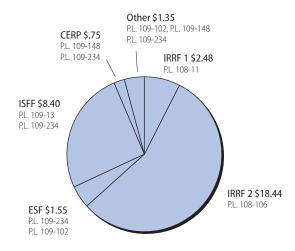


Over the past three years, more than half of U.S. reconstruction funding has come from IRFF 1 and IRRF 2, created under P.L. 109-11 and P.L. 108-106, respectively. U.S. agencies involved in the execution of reconstruction funding include DoD, DoS, USAID, and others. Projects highlighted earlier in this section range from infrastructure development to refugee and migration assistance. The appropriated funds are highlighted in Table 2-18.

New SIGIR Mandate

On December 20, 2006, the President signed P.L. 109-440, the Iraq Reconstruction Accountability Act of 2006. (For additional details, see Section 3, Legislative Update). Under P.L. 109-440, the IRRF is defined as including any U.S. funds made available for FY 2006 for the reconstruction of Iraq, regardless of how they are designated. Figure 2-56 identifies the primary funding activities associated with the new mandate, including ISFF, CERP, ESF, and others, representing nearly \$12 billion in additional oversight. SIGIR now oversees \$32.96 billion in reconstruction funding.

Figure 2-56 **SUMMARY OF SIGIR OVERSIGHT** \$32.96 Billion Source: SIGIR Analysis of U.S. Appropriated Funds



CERP = Commander's Emergency Response Program IRRF 1 & 2 = Iraq Relief and Reconstruction Funds **ISFF** = Iraq Security Forces Fund **ESF** = Economic Support Fund

P.L. = Public Law

SECTOR SUMMARIES

FUNDING MECHANISM	CONSOLIDATED APPROPRIATIONS RESOLUTION, 2003	EMERGENCY WARTIME SUPPLEMENTAL APPROPRIATIONS ACT, 2003	EMERGENCY APPROPRIATIONS ACT FOR THE DEFENSE AND FOR THE RECONSTRUCTION RAQAND AFGHANISTAN, 2004	DEPARTMENT OF DEFENSE APPROPRIATIONS ACT, 2005	EMERGENCY SUPPLEMENTAL APPROPRIATIONS ACT FOR DEFENSE, THE GLOBAL WAR ON TERROR, AND TSUNAMI RELEF,	APPROPRIATIONS FOR THE DEPARTMENT OF STATE, FY 2006	APPROPRIATIONS EMERGENCY DEPARTMENT FOR THE SUPPLEMENTAL OF DEFENSE DEPARTMENT OF APPROPRIATIONS DEFENSE, FY 2006 FOR FY 2006 ACT, FY 2007	EMERGENCY SUPPLEMENTAL PPROPRIATIONS AF FOR FY 2006	DEPARTMENT OF DEFENSE PPROPRIATIONS ACT, FY 2007	Total Appropriations
PUBLIC LAW #	P.L. 108-7	P.L. 108-11	P.L. 108-106	P.L. 108-287	P.L. 109-13	P.L.109-102	P.L. 109-148	P.L.109-234	P.L.109-289	
DATE OF ENACTMENT	02/20/03	04/16/03	11/06/03	08/05/04	05/11/05	11/14/05	12/30/05	06/12/06	09/53/06	
Iraq Relief and Reconstruction Fund (IRRF 2)			\$18,439,000,000							\$18,439,000,000
Iraq Security Forces Fund (ISFF)					\$5,391,000,000		\$	\$ 3,007,000,000 \$	\$1,700,000,000	\$10,098,000,000
Iraq Relief and Reconstruction Fund (IRRF 1)		\$2,475,000,000								\$2,475,000,000
Commander's Emergency Response Program (CERP)				\$140,000,000	\$718,000,000		\$408,000,000	\$345,000,000	\$375,000,000	\$1,986,000,000
Economic Support Fund (ESF) ^a	\$40,000,000	\$10,000,000				\$60,390,000	₩	\$1,485,000,000		\$1,595,390,000
Coalition Provisional Authority (CPA) ^b			\$908,000,000							\$908,000,000
Assistance to Iraq and Afghanistan Military and Security Forces ^c							\$500,000,000			\$500,000,000
Natural Resources Risk Remediation Fund (NRRRF)		\$489,300,000								\$489,300,000
Military Construction ^d							\$341,900,000	\$34,900,000		\$376,800,000
New Iraqi Army ^e				\$210,000,000						\$210,000,000
Project and Contracting Office (PCO/DoD) ^f								\$200,000,000		\$200,000,000
International Disaster Assistance		\$143,800,000								\$143,800,000
Combatant Commander Initiative Fund (CINC Initiative Fund)®		\$29,750,000	\$12,750,000	\$21,250,000	\$21,250,000		\$21,250,000	\$21,250,000		\$127,500,000
USAID Administrative Expenses		\$21,000,000			\$24,400,000			\$79,000,000		\$124,400,000
Department of State, International Narcotics Control and Law Enforcement (DoS/INL)		\$20,000,000						\$91,400,000		\$111,400,000
Diplomatic and Consular Programs ⁹					\$49,659,000	\$56,908,000				\$106,567,000
Special Inspector General for Iraq Reconstruction (SIGIR) $^{\!\! h}$			\$75,000,000					\$24,000,000		\$99,000,000
Child Survival and Health		\$90,000,000								\$90,000,000
P.L. 480 Title II Food Aid	\$68,000,000									\$68,000,000
Voluntary Peacekeeping Operations		\$50,000,000								\$50,000,000
Emergency Refugee and Migration Assistance		\$37,000,000								\$37,000,000
Overseas Humanitarian, Disaster and Civic Aid ^e			\$17,000,000							\$17,000,000
International Affairs Technical Assistance								\$13,000,000		\$13,000,000
United States Agency for International Development, Office of Inspector General (USAID OIG)		\$3,500,000	\$1,900,000		\$2,500,000					\$7,900,000
DoD Office of the Inspector General								\$5,000,000		\$5,000,000
Department of Treasury (Salaries and Expenses)								\$1,800,000		\$1,800,000
Department of State, Office of Inspector General								\$1,000,000		\$1,000,000
Legal Activities and U.S. Marshals (Salaries and Expenses)								\$1,000,000		\$1,000,000
TOTAL	\$108,000,000	\$3,369,350,000	\$19,453,650,000	\$371,250,000	\$6,206,809,000	\$117,298,000	\$1,271,150,000 \$5,309,350,000 \$2,075,000,000	2\$ 000'058'608'5	2,075,000,000	\$38,281,857,000

^{* \$40}M from FY 2003 ESF base account that was not reimbursed; \$10M from PL. 108-116

* Excludes \$75M for Special Inspector General for Iraq Reconstruction under PL. 108-106

* Excludes \$75M for Special Inspector General for Iraq Reconstruction under PL. 108-106

* Congress provided Dob with authorization for drawdown authority for these funds

* As identified in GRD bi-weekly reports and PL. 108-234

* Where Iraq-only appropriations unavailable, based on historical trends SIGIR split 85% for Iraq and 15% for Afghanistan

* Where Iraq-only appropriations unavailable, based on historical trends SIGIR split 85% for Iraq and 15% for Afghanistan

* Only Congress provided funding for PCD in on other appropriations bills, more details will be available in future SIGIR reports

* Includes Iraq Reconstruction Management Office salaries and expenses, mission travel, public diplomacy programs, and other operating expenses related to reconstruction.

* CPA operating expenses under PL. 108-106

International Donor Funds

As IRRF funding winds down, assistance from other international donors is likely to play an increasing role in financing reconstruction in Iraq. The International Compact for Iraq (the Compact) is designed to help the GOI attract more financial support from the international community. This quarter, the total funds pledged for Iraq reconstruction by other international donors since 2003 increased slightly-from \$15.02 billion to \$15.21 billion, with an additional pledge of \$190 million from the United Kingdom. Precise information on the expenditures of these funds, however, continues to be difficult to obtain. The World Bank has not yet been able to fully update the status of the 2003 Madrid Conference pledges as requested by the donors, partly because of insufficient reporting on the part of some donors. For information on these pledges, see Table 2-19.

The Donor Committee that oversees the International Reconstruction Fund Facility for Iraq (IRFFI) remains intact although it has not had a formal meeting since July 2005. Twenty-six donors have committed a total of \$1.59 billion⁴⁵⁴ to the two IRFFI funds, the UN Development Group Iraq Trust Fund (UNDG ITF) and the World Bank Iraq Trust Fund (WB ITF). The WB ITF was scheduled to close December 31, 2007; however, the World Bank has recommended extending the fund through December 2010 to allow adequate time to finance the existing projects to completion. 455

For a list of the members of the Donor Committee, see Table 2-20.

The future of international donor support to Iraq is expected to be shaped primarily by the Compact, which has been negotiated but not yet signed as this Report goes to press. In the context of the Compact, the GOI has asked the international community for:

- financial assistance, including loans and loan guarantees, to support major investments in basic services that are currently beyond the GOI's financial and technical capacity to execute given its volatile oil revenue stream
- debt relief (GOI wants to reduce non-Paris Club debt, reparations, and the remaining 20% of Paris Club debt by 2007.)456
- managerial and technical assistance, particularly to government ministries that need enhanced capacity to manage public investment
- assistance with a private-sector development strategy and promotion of private investment
- institutional strengthening and capacity building of government and civil society institutions
- assistance with accession to international agreements and development of new regional and international initiatives

The additional international financial assistance would help fund the Investment and Action Plan for Growth (IAPG), a detailed plan to quantify Iraq's financial and technical needs. After the Compact is signed, the GOI will develop this plan in coordination with a wide range of stakeholders, including the Iraqi

PLEDGES OF RECONSTRUCTION AID TO IRAQ, AS OF 12/31/2006 (U.S. DOLLARS)

Donor	Original Madrid Pledge October 2003	Additional Pledges since Madrid Conference	TOTAL PLEDGES
Australia	\$45,590,974	\$81,042,221	\$126,633,195
Austria	5,478,165		5,478,165
Belgium	5,890,500		5,890,500
Bulgaria	640,000		640,000
Canada	187,466,454		187,466,454
China	25,000,000		25,000,000
Cyprus	117,810		117,810
Czech Republic	14,659,023		14,659,023
Democratic Governance Thematic Trust Fund		100,000	100,000
Denmark	26,952,384	40,000,000	66,952,384
Estonia	82,467		82,467
Finland	5,890,500		5,890,500
France		32,288	32,288
Germany		10,000,000	10,000,000
Greece	3,534,300		3,534,300
Hungary	1,237,005		1,237,005
Iceland	2,500,000		2,500,000
India	10,000,000		10,000,000
Iran	5,000,000	5,000,000	10,000,000
Ireland	3,534,300		3,534,300
Italy	235,620,020		235,620,020
Japan	4,914,000,000	50,000,000	4,964,000,000
Jordan		75,000	75,000
South Korea	200,000,000		200,000,000
Kuwait	500,000,000	65,000,000	565,000,000
Lithuania		30,000	30,000
Luxembourg (EURO)	2,356,200		2,356,200
Malta	27,000		27,000
Netherlands	9,424,801		9,424,801
New Zealand	3,351,975	990,000	4,341,975
Norway	12,867,617		12,867,617
Oman	3,000,000		3,000,000
Pakistan	2,500,000		2,500,000
Qatar	100,000,000		100,000,000
Saudi Arabia	500,000,000		500,000,000
Slovenia	419,382		419,382
Spain	220,000,000	2,380,000	222,380,000
Sri Lanka		75,500	75,500
Sweden	33,000,000		33,000,000

Donor	Original Madrid Pledge October 2003	Additional Pledges since Madrid Conference	Total Pledges
Turkey	50,000,000		50,000,000
United Arab Emirates	215,000,000		215,000,000
United Kingdom	452,326,416	190,000,000	642,326,416
United States	10,000,000		10,000,000
Vietnam		700,000	700,000
Subtotal	\$7,807,467,293	\$445,425,009	\$8,252,892,302
European Commission	235,620,000	669,680,000	905,300,000
Subtotal	\$8,043,087,293	\$1,115,105,009	\$9,158,192,302
International Financial Institutions	,		
IMF (low range)	2,550,000,000		2,550,000,000
World Bank (low range)	3,000,000,000		3,000,000,000
Islamic Development Bank		500,000,000	500,000,000
Subtotal	\$5,550,000,000	\$500,000,000	\$6,050,000,000
Total International Donor Assistance	\$13,593,087,293	\$1,615,105,009	\$15,208,192,302

Source: DoS, Iraqi Donor Assistance Database, donor response to SIGIR.

Note: Data not formally reviewed, audited, or verified. Pre-Madrid pledges for humanitarian assistance are not included in this table.

TABLE 2-19

and international banks, multilateral organizations, and the Iraqi private sector as an integral part of the formulation of Iraq's National Development Strategy. The IAPG will focus on the reconstruction of sectors that are critical to Iraq's economic recovery, such as Energy⁴⁵⁷ and Agriculture. Other sectors will be considered on a prioritized basis as part of the ongoing development of the National Development Strategy.

DONOR COORDINATION

As most U.S. reconstruction funding is expended, the Iraqis and international donors have become more aware of the need to target donor funds with more planning and precision. Improving donor coordination also continues to be a priority for the United States; the Baghdad Coordination Group and sector working groups continue to meet with increasing participation by Iraqi leadership.

The Ministry of Planning's Donor Assistance Database (DAD), supported by the UN

MEMBERS OF THE INTERNATIONAL RECONSTRUCTION FUND FACILITY FOR IRAQ DONOR COMMITTEE

Canada (Chair)	Kuwait
United Kingdom	Iran
Italy	Norway
India	South Korea
Turkey*	Qatar
Sweden	Spain
Finland*	European Commission
Japan	United States
Australia	Denmark

Germany

TABLE 2-20

Development Programme (UNDP), continues to improve as an assistance management tool to track all donor assistance. DAD shows the progress of pending and ongoing donor-supported projects and is available online at www.mop-iraq.org. Although the database is not complete, more projects are added each quarter, and the Ministry of Plan-

^{*} Rotating members

ning is becoming more adept at using it. As of December 31, 2006, DAD included 17,430 projects, totaling \$17.13 billion, associated with 20 donors. Against these projects, \$14.78 billion had been committed, and \$9.92 billion had been expended. Although these numbers are not verified or audited, DAD lists 16,941 U.S. projects, totaling \$13.61 billion. Against these projects, DAD reflects that the United States had committed \$11.99 billion and expended \$8.13 billion. 458

MAJOR BILATERAL AND MULTILATERAL PROGRAMS

Iran

The economic ties between Iran and Iraq have grown stronger after the Iranian Foreign Minister's visit in May 2006. In a joint statement, the two countries referred to their deep-rooted historical, cultural, and religious ties and called for promotion of bilateral ties in all fields based on the principle of non-interference in each other's internal affairs and commitment to bilateral agreements. The Iran-Iraq Cooperation Headquarters was created to facilitate economic cooperation. The governors general of two border provinces in Iran and Iraq signed a memorandum of understanding stating that the Iranian Oil Ministry would export one million liters of oil and its by-product to Iraq daily for three months. The Iranian Ministry of Oil is providing a credit to build oil pipelines to move oil products between the two countries. 459 Direct financial support from Iran includes:

- \$45 million credit for two oil pipelines connecting Iran and Iraq
- \$10 million grant to IRFFI⁴⁶⁰
- \$1 billion line of credit⁴⁶¹

Japan

Japan has pledged and expended more assistance to Iraq than any other country except the United States. By May 2005, Japan had completely obligated its Madrid pledge of \$1.5 billion plus an additional \$50 million.

Japan has now committed approximately \$1.6 billion of the promised \$3.5 billion in concessional loans. In October 2006, Japan announced a loan for six projects totaling \$863 million:

- \$259 million to a development project in the port sector
- \$81 million to a loan program in the irrigation sector
- \$315 million to the **Al-Mussaib Thermal Power Plant** rehabilitation project
- \$28 million to Samawah bridges and roads construction projects
- \$20 million for engineering services to upgrade the **Basrah Refinery**
- \$160 million to the **Khor Al-Zubair Fertilizer Plant** rehabilitation project

In December 2006, the Japanese government announced a loan for two additional projects to upgrade Iraq's oil and electricity sectors totaling \$738 million—\$447 million to construct a pipeline to export oil from Basrah and \$291 million to improve facilities for electricity transmission.⁴⁶² The Foreign Ministry

said the 40-year loan would be made through the state-funded Japan Bank for International Cooperation.

United Kingdom

The United Kingdom (UK) is one of the first major donors to fully expend all of its assistance to Iraq since 2003 (\$920). This includes its Madrid pledge of \$452 million and humanitarian assistance of \$468 million. An additional pledge of \$190 million has recently been announced, bringing total UK assistance to \$1.11 billion. Table 2-21 shows UK expenditures by program.

The UK also has a quick-impact program (\$59 million) financed by the Ministry of Defense, which has a similar mission to that of CERP.

The Department for International Development's (DFID) program for 2006-2007 focuses on economic reform, delivering power and

water improvements in the south, governance and institution-building in Baghdad and the south, support for civil society and political participation, and capacity building in the Ministry of Interior. DFID funds a World Bank advisor in Baghdad to speed up engagement in oil and electricity issues and to help the GOI develop a plan for the energy sector.

European Commission

The European Commission (EC) has pledged approximately \$905 million, of which \$779 million was for reconstruction assistance. Twenty-four percent of EC funding has been used to support education initiatives; 14% has supported health programs; 13% has supported poverty-reduction initiatives; 21% has supported the electoral/constitutional processes; and the remaining 28% has supported capacity building.

The \$252 million program announced for

UK Donor Expenditure as of December 31, 2006 **UNOFFICIAL ESTIMATE (IN MILLIONS)**

Program	Expenditures	
DFID Bilateral Programme	\$536	
IRFFI Trust Funds	127	
Contribution to EC Programme	142	
FCO Programmes	64	
Global Conflict Prevention Pool	72	
MoD Quick Impact Projects	59	
Total	\$1,000	

Source: DFID, response to SIGIR, January 3, 2007.

2006 focuses on improving the quality of life of the Iraqi people by funding programs to:

- support basic services (\$223.65 million)
- provide a technical assistance facility to provide capacity building (\$7.56 million)
- support the Iraqi refugees inside Iraq (\$12.6 million)
- enhance the capacity of the Trade and Customs Administration (\$8.19 million)

The Trade and Customs Administration capacity-building initiative will support the EC-Iraq Trade and Cooperation Agreement. This agreement aims to improve the trade arrangements between Iraq and the EU, covering a wide range of issues, including trade in goods, services, measures to encourage investment, customs, intellectual and industrial property rights, and public procurement rules.⁴⁶³

World Bank

In January 2004, donors authorized the World Bank to administer the World Bank ITF, which began receiving funds in March 2004. Table 2-22 summarizes WB ITF and UNDG ITF allocations to IRFFI.

As of December 31, 2006, the World Bank ITF had received \$458 million from 17 donors. Of the tendered amount (\$278 million), \$166 million had been contracted, and \$76 million had been expended for projects:⁴⁶⁴

- \$411 million of the World Bank ITF has been allocated to 15 projects.
- Twelve of the 15 projects, valued at \$399 million, are for projects implemented directly by GOI authorities.

- The remaining three, valued at \$12 million, are capacity building and technical assistance activities implemented by the World Bank.
- Two World Bank projects financed by the ITF—the First Capacity Building Project and the Emergency Textbook Provision Project—are completed and closed.

Figure 2-57 reflects the status of World Bank ITF funds through December 31, 2006.

The World Bank has approved three projects, totaling \$275 million, through its International Development Association loans. The third was signed on December 12, 2006, to support hydropower in Iraq. The Board of Executive Directors approved a credit of \$40 million for the rehabilitation of two hydroelectric power stations in the Kurdistan region. 465

Figure 2-58 shows international donor contributions to the IRFFI, as of December 31, 2006.

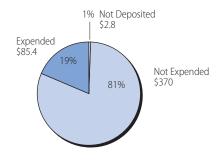
Figure 2-57

WORLD BANK - INTERNATIONAL TRUST FUND

\$ Millions

Total Commitments \$458.2 Million

Source: www.irffi.org, (12/31/2006)



Note: Expenditures include project and administrative disbursements. Figures may not total due to rounding.

TOTAL IRFFI DONOR CONTRIBUTIONS, AS OF 12/31/2006

	Сомм	COMMITMENTS		DEPOSITS	
Donor	World Bank	United Nations	World Bank	United Nations	
Australia	\$16,400,000	\$16,775,000	\$16,100,000	\$16,775,000	
Australia (Dept of Immigration)	-	3,292,000	-	3,292,000	
Belgium	-	1,321,000	-	1,321,000	
Canada	22,300,000	46,400,000	22,300,000	46,400,000	
Denmark	-	10,666,000	-	10,666,000	
Finland	2,600,000	6,234,000	2,600,000	6,234,000	
Germany	-	10,000,000	-	10,000,000	
Greece	-	3,630,000	-	3,630,000	
Iceland	1,000,000	500,000	1,000,000	500,000	
India	5,000,000	5,000,000	5,000,000	5,000,000	
Irana	-	-	-	-	
Ireland	-	1,226,000	-	1,226,000	
Italy	-	29,782,000	-	29,782,000	
Japan	130,634,143	360,951,000	130,634,143	360,951,000	
South Korea	4,000,000	11,000,000	4,000,000	11,000,000	
Kuwait	5,000,000	5,000,000	5,000,000	5,000,000	
Luxembourg	-	2,319,000	-	2,319,000	
Netherlands	6,200,000	6,697,000	6,200,000	6,697,000	
New Zealand	-	3,365,000	-	3,365,000	
Norway	6,700,000	7,009,000	6,700,000	7,009,000	
Qatar	5,000,000	5,000,000	2,500,000	5,000,000	
Spain	20,000,000	47,500,000	20,000,000	47,509,000	
Sweden	5,800,000	10,622,000	5,800,000	10,622,000	
Turkey	1,000,000	200,000	1,000,000	200,000	
United Kingdom	71,400,000	55,542,000	71,400,000	55,542,000	
United States	5,000,000	5,000,000	5,000,000	5,000,000	
European Commission (Rapid Reaction Mechanism)	-	24,978,000	-	24,978,000	
European Commission (Human Rights)	-	7,258,000	-	7,258,000	
European Commission	150,214,592	439,141,000	150,214,592	428,961,000	
Total Donor Assistance	\$458,248,735	\$1,126,416,000	\$455,448,735	\$1,116,236,000	

Source: www.irffi.org

 $^{^{\}rm a}$ Iran has pledged \$10 million, but funds have not been allocated between WB ITF and UNDG ITF.

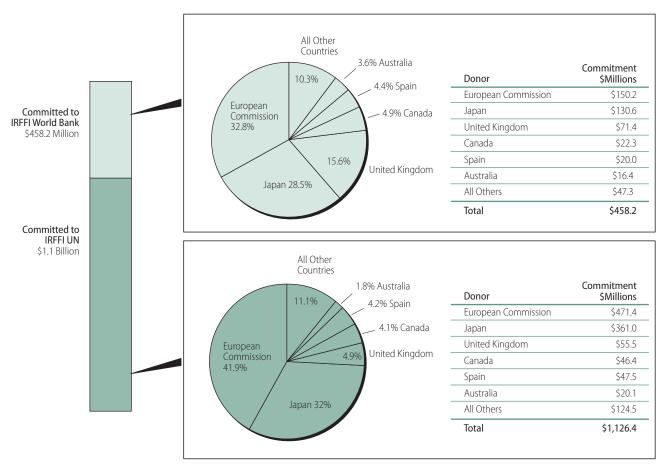
United Nations

The United Nations Development Programme (UNDP) administers the UNDG ITF. As of December 31, 2006, 25 donors have committed \$1.13 billion to the ITF, of which \$1.12 billion has been deposited. Sixteen UN agencies are implementing 110 projects with \$886 million in funding. UNDP has the most approved

funding at 28%, followed by the UN Office for Project Services (UNOPS) at 18% and United Nations International Children's Emergency Fund (UNICEF) at 14%:

- \$688 million (78%) has been obligated.
- \$586 million (66%) has been expended.
- 21 projects have been completed.

Figure 2-58 **INTERNATIONAL DONOR CONTRIBUTIONS TO IRFFI** Source: www.irffi.org, (12/31/2006)



Note: Figures may not total due to rounding.

Figure 2-59 reflects the status of UNDG ITF funds through December 31, 2006.

Donors can earmark their contributions to seven different clusters within the ITF. Infrastructure rehabilitation (22%) and support for the electoral process (20%) are the most popular clusters among donors. Other popular sectors among donors and Iraqis include agriculture, education, and health. The UN website (www.irffi.org) posted \$490 million in contract awards: 17% to Iraq, 14% to Japan, 11% to the UK, and 10% to China. U.S. firms account for 2% of these contracts.

Figure 2-60 shows the UNDG ITF by UN cluster.

International Monetary Fund

International Monetary Fund (IMF) funding remains available for balance of payments support:

- \$297 million from the Emergency Post-conflict Assistance package
- \$475 million from the Stand-By Arrangement (SBA)

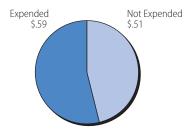
As of December 2006, Iraq had not drawn against any of its SBA funds.

Islamic Development Bank

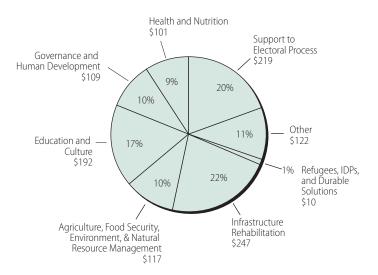
The Islamic Development Bank (IDB) will provide a soft loan of \$12.9 million for con-

Figure 2-60
UNDG IRAQ TRUST FUND
Total Commitments \$1.1 Billion
Source: www.irffi.org
(12/31/2006)
\$ Millions

Figure 2-59
UNITED NATIONS DEVELOPMENT GROUP - INTERNATIONAL TRUST FUND
Total Commitments \$1.1 Billion
Source: www.irffi.org
(12/31/2006)



\$ Billions



structing and furnishing 15 elementary schools and a technical assistance grant for capacity building in the Iraqi Ministry of Education. The loan is part of a \$500 million program launched by IDB for supporting the reconstruction and rehabilitation effort in Iraq. 466

IRAQI FUNDS

One of the GOI's commitments under the Compact is to ensure that legislation, regulation, systems, and processes are in place that will allow efficient and effective disbursement of its own budget. Overall, the GOI was able to spend 65% of its 2006 budget. Table 2-23 shows budget execution by ministry.

Iraqi ministries struggle to expend their capital budgets quickly. The president of the Iraqi Board of Supreme Audit reported that only about 20% of Iraq's \$6 billion 2006 capital budget has been spent.

The 2007 budget has been approved by the Council of Ministers and has been submitted to the Council of Representatives. Total revenues for the proposed Iraqi 2007 budget are \$33.4 billion, and budgeted expenditures are \$41 billion. The deficit of \$7.6 billion will be financed by funds carried forward from previous years. Operating expenditures will increase by 18.7% to \$30.7 billion over 2006 budgeted amounts. This amount includes \$7.3 billion for security, a 35% increase from 2006. Capital expenditures will increase by 22% to \$10 billion. Special initiatives totaling \$600 million include:

• DDR (disarmament, demobilization, and reintegration, \$150 million)

2006 IRAQI BUDGET EXECUTION BY MINISTRY, AS OF AUGUST 2006

MINISTRY	PERCENT OF TOTAL BUDGET EXPENDED
Interior	50%
Health	26%
Defense	24%
Education	68%
Transportation	11%
Municipalities and Public Works	20%
Housing and Construction	20%
Water Resources	30%
Oil	1%
Communications	2%
Electricity	33%
Total	65%

Source: DoS, response to SIGIR, January 16, 2007.

- Baghdad Jobs (\$100 million)
- Primary Education Construction (\$150 million)
- University Education Construction (\$100 million)
- Pensions for Former Military (\$100 million)467

LOANS FROM INTERNATIONAL DONORS

Loans available from international donors:

- Iran: \$1 billion line of credit
- Japan: \$3.5 billion (\$1.6 billion has been committed.)
- Saudi Arabia: \$1 billion in trade credits and
- IMF: \$1.15 billion balance of payments support and loans
- World Bank: \$3-\$5 billion in loans (\$500 million for concessional loans)

DEBT RELIEF

In 2004, Iraq's public debt was estimated at \$120.2 billion. Paris Club members have agreed to cancel 80% of their claims against Iraq; the United States, Cyprus, and Malta have cancelled 100% of their debt. This quarter, Iraq reached an agreement with Indonesia, canceling 80% of its bilateral claims against Iraq. The accord is comparable to the bilateral agreements concluded between Iraq and its Paris Club creditors.

IRAQ'S CREDIT RATING

Debt relief has improved Iraq's credit rating. Global Insight⁴⁶⁸ has revised Iraq's mediumterm sovereign credit rating, lowering its overall risk score to 75 as a result of the sharp rise in the country's oil export revenues and the huge debt-relief deal under the 2004 Paris Club agreement.

Debt relief has improved Iraq's sovereign external solvency and liquidity position because of the deferment of interest and principal payments until 2011. In addition, higher global oil prices have recently improved the current-account balance, which is also bolstered by substantial official transfer inflows.

Nevertheless, Iraq's sovereign credit still carries an extremely high payments risk, mainly because of its elevated levels of external debt, huge stocks of unresolved arrears left over from the 1980s, and the vulnerability of its foreign-exchange earnings to volatile global oil prices and insurgent attacks. Iraq's credit rating is also constrained by its narrowly based economy, weak institutions, poor governance, and security issues. Furthermore, given the historical volatility of global energy prices, there is always a significant risk that oil prices can fall sharply from current levels.469

SECTOR SUMMARIES

ANTICORRUPTION UPDATE

Corruption continues to limit the ability of the GOI to manage reconstruction efforts and key areas of economic policy. The Iraqi Ministry of Oil estimates that Iraq loses \$700 million of revenue each month because of oil smuggling.470 Transparency International ranks Iraq 161st of 163 countries measured. This ranking, 1.9 on the Corruption Perceptions Index, indicates high levels of perceived corruption.⁴⁷¹ SIGIR's October 2006 Report discussed ways that Iraq, the United States, and international donors were helping to combat corruption, including new commitments and benchmarks for key actions that the Iraqis would agree to as part of the Compact. The U.S. Mission interagency Anticorruption Working Group helped the GOI identify anticorruption initiatives for the Compact and will help Iraq implement some of the key anticorruption priorities outlined in the Compact. The U.S. Mission is providing an advisor for each of the three Iraqi anticorruption institutions—the Commission on Public Integrity (CPI), the Board of Supreme Audit (BSA), and the ministry Inspectors General (IGs).

Commission on Public Integrity

The future of the CPI is uncertain. It was created by the Coalition Provisional Authority, but never written into Iraqi law. Iraqi legislators have stalled a vote on whether to give the commission permanent status or to dissolve it and let the ministry IGs audit their own agencies.

Meanwhile, the head of the CPI has been the subject of corruption investigations by the Parliamentary Anticorruption Committee. 472 The CPI has nonetheless pushed for the prosecution of several former ministers and uncovered corruption in the Interior Ministry; 3,000 employees were dismissed in October for corruption and sectarianism. 473 Targets have included former Ministers of Defense and Electricity.

CPI's current investigations include the quality of food purchased by the Ministry of Trade for monthly rations, the disappearance of petroleum products under the supervision of the Ministry of Oil, the lack of progress refurbishing the railroad system, and misconduct by 451 police officers in the Ministry of Interior.

Board of Supreme Audit

The UN is coordinating with international audit boards to train BSA staff according to modern audit systems. 474 Members of the Arab Organization of Supreme Audit Institutions (ARABOSAI) would contribute to training the BSA Iraqi staff as part of a plan created by the ARABOSAI training committee when it met in Tunisia in January 2007.

U.S. Inspectors General

IGs from the United States continue to support Iraq's developing inspector general system. U.S. IGs have provided training, mentoring, and assistance to Iraqi IG staffs. The Iraqi Anti-Corruption and Principled Governance Initiative provides advisory support to the entire Iraqi anticorruption system by deploying IG advisors to Iraq. The DoD Office of Inspector General has detailed a full-time evaluator to MNSTC-I in Baghdad to support the IGs of the Ministries of Defense and Interior in their work with the Iraqi Security Forces. 475

International Compact for Iraq

As part of the Compact, Iraq will commit to specific steps to improve transparency and inhibit corruption in exchange for pledges of aid and other international support. The current Compact language outlines a process to develop a legal framework and build institutional capacity to deter corruption at all levels of government.

Key priorities and benchmarks include:

- strengthening the rule of law and the capacities of law-enforcement agencies
- developing anticorruption plans for institutions with substantial revenue and expenditures
- fully implementing the public income and asset disclosure law and legislation to enable asset seizure and forfeiture
- strengthening capacity for internal audit and the BSA
- reviewing the mandates of the CPI and the inspectors general to ensure that they work as independent, professional, technical, and non-political bodies
- developing a comprehensive system of internal and external controls within government, including conflict of interest policies, audit, and evaluation
- ratifying the UN Convention Against Corruption
- launching a public education campaign on anticorruption

SECTOR SUMMARIES